

DOCUMENT RESUME

ED 399 220

SP 036 664

TITLE Tomorrow's Schools of Education: A Report of the Holmes Group.

INSTITUTION Holmes Group, Inc., East Lansing, MI.

SPONS AGENCY DeWitt Wallace / Reader's Digest Fund, Pleasantville, N.Y.; Rockefeller Foundation, New York, N.Y.

PUB DATE 95

NOTE 113p.; Earlier related reports by the Holmes Group include "Tomorrow's Teachers: A Report of the Holmes Group" (ED 270 454) and "Tomorrow's Schools: Principles for the Design of the Professional Development School" (ED 328 533).

AVAILABLE FROM The Holmes Group, 201 Erickson Hall, East Lansing, MI 48824-1034 (\$14 prepaid; boxed set of the three Holmes reports \$36 prepaid).

PUB TYPE Viewpoints (Opinion/Position Papers, Essays, etc.) (120)

EDRS PRICE MF01/PC05 Plus Postage.

DESCRIPTORS College School Cooperation; Educational Change; *Educational Improvement; Elementary Secondary Education; Faculty Development; Higher Education; Knowledge Base for Teaching; Partnerships in Education; Position Papers; *Professional Development Schools; *Schools of Education; *Teacher Education; *Teacher Education Curriculum; Teacher Educators

IDENTIFIERS Diversity (Faculty); Diversity (Student); *Holmes Group

ABSTRACT

This report contains nine chapters: "A New Beginning"; "The Heart of the Matter: Three Kinds of Development"; "Special Knowledge for Educators"; "Participating in Policy Development"; "Commitment to Diversity"; "Human Resources: Making People Matter"; "The Core of Learning: What All Educators Must Know"; "The Professional Development School: Integral to Tomorrow's School of Education"; and "New Commitments and New Kinds of Accountability for the TSE." To correct the problem of uneven quality in the education and screening of educators for U.S. schools, the report proposes an altered mission for schools of education. Knowledge development, professional development, and policy development lie at the heart of the mission. To fulfill this mission, the 250 Holmes Group member institutions are challenged to raise their quality standards and make important changes in curriculum, faculty, location of work, and student body. Among the challenges are the following: the education school's curriculum should focus on the learning needs of the young and development of educators at various stages of their careers; university faculties should include teachers, practitioners, and other individuals who are at home working in public schools; programs that prepare school personnel and teacher educators need to actively recruit, retain, and graduate a more ethnically diverse student body; faculty and students in schools of education should work predominantly in professional development schools rather than on college campuses; education schools should join together to form an interconnecting set of networks at local, state, regional, and national levels to ensure better work and accountability. (IAH)

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A Report of The Holmes Group

TOMORROW'S SCHOOLS OF EDUCATION

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A report from the Holmes Group

Tomorrow's Schools of Education

Primary support for the *Tomorrow's Schools* project, including the publication of this document, was provided by the Rockefeller Foundation, the Holmes Group member institutions, and the DeWitt Wallace Reader's Digest Fund. Support for the report and its distribution was also provided by Philip Morris Companies, Inc. The opinions, conclusions, and recommendations expressed herein are not necessarily those of the funding agencies.

Copies of *Tomorrow's Schools of Education* may be ordered from:

The Holmes Group
201 Erickson Hall
East Lansing, MI 48824-1034

single copy (prepaid): \$14.00

A boxed set of the Holmes Trilogy: *Tomorrow's Teachers*, *Tomorrow's Schools*, and *Tomorrow's Schools of Education* can be obtained from the same address at a cost of \$36.00 (prepaid).

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Printed in the United States of America

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Authors of the report

Judith Taack Lanier
President
The Holmes Group
Distinguished Professor
Michigan State University

Gene I. Maeroff
Education Consultant
The Holmes Group

Carlton E. Brown
Dean
School of Liberal Arts
& Education
Hampton University

Gary Sykes
Professor
College of Education
Michigan State University

Frank B. Murray
Dean
College of Education
University of Delaware

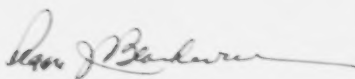
Henrietta Barnes
Professor
College of Education
Michigan State University

Harry Judge
Fellow of Brasenose College
University of Oxford

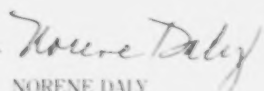
Lonnie Wagstaff
M.K. Hage Centennial Professor
College of Education
University of Texas-Austin

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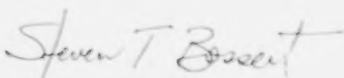
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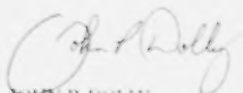
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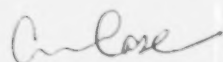
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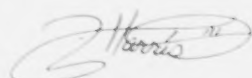
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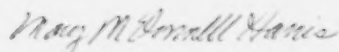
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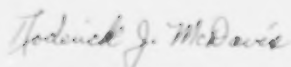
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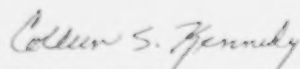
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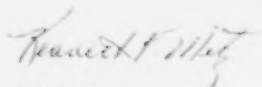
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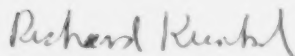
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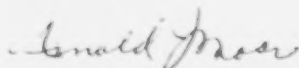
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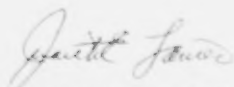
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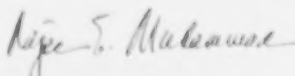
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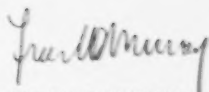
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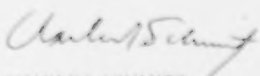
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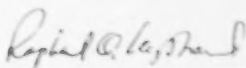
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Holmes Scholar Liason
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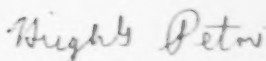
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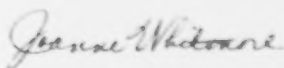
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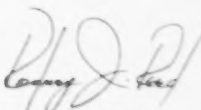
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Holmes Scholar Liason
University of California-Berkeley



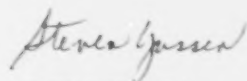
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Dean
Graduate School of Education
SUNY-Buffalo



JOANNE R. WHITMORE
Dean
College & Graduate School of
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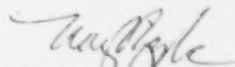
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Dean
College of Education
Pennsylvania State University



STEVEN R. YUSSEN
Dean
College of Education
University of Iowa



WILLIAM ROHWER
Dean
School of Education
University of California-Berkeley



NANCY L. ZIMMER
Dean
College of Education
Ohio State University

Preface

The Holmes Group grew out of a series of meetings and deliberations a decade ago of a small group of education deans on the enduring problems associated with the generally low quality of teacher preparation in the United States. Their initial discussions focused on the lax standards that continue to be tolerated. Weak accreditation policies and practices and the historic indifference to teacher preparation on the part of the major research universities received special attention. Weak accreditation arrangements and the low priority assigned to teacher education at major universities were part of the equation, and, in the end, this connection became the focus of the group's initial work.

Over a three-year period, the deans, in consultation with many others, saw that problems they faced were so great and complicated that their solution would require a long-term commitment of like-minded institutions to a reform agenda. Thus, a plan was proposed for a consortium, the Holmes Group, and a set of goals emerged. The consortium wished to see nothing less than the transformation of teaching from an occupation into a genuine profession that would serve the educational needs of children. To this end, the deans sought to align themselves with other organizations, agencies, and institutions that supported their goals and general directions.

The consortium sought to provide the nation with teachers and other educational specialists who have all the attributes of genuine professionals--the knowledge, prestige, autonomy, and earnings that accrue to competent people who are engaged in important matters that are beyond the talent or training of the ordinary person. Those educated at Holmes Group universities should be entrusted fully with the education of their pupils and students. They would be persons, who by talent and training could be fully responsive to immediate demands of the classroom. They would make significant pedagogical and educational policy decisions because they would be competent to make them and because no other person would be more qualified or in a better position to make them.

Thus, the consortium became organized around twin goals: the simultaneous reform of the education of educators and the reform of schooling. It assumed that these reforms would prosper if the nation's colleges and universities were committed to the education of professionals who work in the schools. It assumed also, and somewhat rashly perhaps, that teacher education programs would be different in Holmes institutions for all the reasons that make these institutions so academically powerful in every other respect. They are institutions that attract more than their share of academically

talented students; they have the faculty who, on the whole, are the nation's most authoritative sources of information in their fields; they command substantial resources; and in the case of education, they are the institutions that have educated and will continue to educate large numbers of university faculty for the professoriate in education. A consortium of institutions that educate teacher educators was needed, if only to ensure that the teachers of teachers could do their graduate work in institutions with exemplary teacher education programs.

Bearing these points in mind, the deans recognized that powerful forces worked against major reform years ago and now. One of these forces was the dramatic increase in the demand for teachers that occurred over the decade. If states and localities responded to this demand as they had in the past by giving certification to unqualified persons and allowing certified teachers to teach outside their fields of competence, then efforts to reform teacher education would be substantially undermined once again.

Another force that countered a major reform of teacher education was, ironically, the education reform movement itself. The proposals for education reform suggested that attracting higher quality persons to teaching was a key component--a recommendation the deans endorsed as well. Reformers recommended in addition that attention be given to stronger preparation in the liberal arts, increased subject matter competence, better testing and assessment, increased clinical experience, extended programs, differentiated career opportunities, raising salaries, and the like. But until recently few of the reformers had seen that these issues were interrelated and more complex than each by itself would suggest, because each by itself could become a superficial and symbolic reform that could actually worsen the problems it was meant to solve. The reform proposals would fail, as they had in the past, because they attempt education reform by simply telling teachers and everyone else what to do, rather than by empowering them to do what must be done. And they would fail because the reforms amounted to little more than slogans that could be interpreted in ways that require little actual change in the way schooling is conducted. Few molds were broken and the key features of American education--universal compulsion and group instruction--remain in place in the nation's 18,000 school districts.

The quality of teachers, of course, is tied to the quality of their education and the deans could not improve teacher education very much by changing colleges of education without changing, as well, the universities, the credentialing systems, and the schools themselves. Almost everything had to change: the rewards and career opportunities for teachers; the standards, nature, and substance of

professional education; the quality and coherence of the liberal arts and subject matter fields; and the professional certification and licensing apparatus. They must be changed in mutually supportive ways that in fact will yield the kind of educators we envision.

The policy changes recommended by reformers are only the first stage of lasting reform. Regrettably, reform efforts often end with the publication of a report. Past attempts at large-scale reform show that changes imposed from above, without the concurrence and collaboration of those who must implement them, have limited and unpredictable effects. Changes in the structure and content of teacher education depend upon long-term and genuine reform efforts by policy-makers, scholars, and practitioners, and for this reason, the Holmes Group incorporated itself as a long-term regional and national organization.

Members of the Holmes Group recognized that there would be many mistakes, false starts, and unanticipated problems with their proposed agenda. They also recognized that solutions that work in one setting inevitably require adaptation to work in another setting, and for this reason, each member's plan for achieving the group's goals would be different. They foresaw that in the years ahead they would learn much from each other about the strengths and limits of the proposed agenda. Hence, the Holmes Group was born committed to exploring a range of alternative solutions organized around five themes and to sharing the outcomes of their experiments with ourselves and with others.

In May 1986, the Holmes Group, published *Tomorrow's Teachers*, which set forth their vision of good teaching, analyzed the obstacles to attaining it, and recommended an agenda of actions. They issued invitations to over 100 research universities to join a national not-for-profit consortium that would support members in long-term work to enact the agenda. More than ninety universities accepted and the consortium was formed at a constituting conference in Washington, DC, in January 1987.

What did Holmes Group universities commit themselves to do?

Resolving to work in their own institutions for the professionalization of teaching, Holmes Group members joined in implementing the five goals set forth in the Group's manifesto, *Tomorrow's Teachers*:

1. Make teaching intellectually sound.

Require that prospective teachers gain a broad, coherent liberal arts foundation that incorporates enduring, multicultural values and forms of inquiry, and that is taught to a depth of understanding that enables them so to teach.

Require that prospective teachers study the subjects they will teach in depth and earn a bachelor's degree in at least one academic subject. Place that subject in a broad context of knowledge and culture. Teach that content so that undergraduate students learn to inquire about it on their own and to connect it with related subjects and issues of value.

Present the study and practice of teaching in a coherent sequence of courses that integrate research findings about learning and teaching and that demonstrate how to select and shape particular content knowledge into clear, challenging lessons for children and adolescents.

Prepare teacher candidates--through their liberal arts, education studies, and clinical experiences--to work with culturally and socio-economically diverse students.

Give teacher candidates realistic, demanding, well-coached assignments in classrooms. These should be long enough, complex enough, and varied enough to prepare them to demonstrate success with students who are different from themselves and for whom school learning is difficult.

The Holmes Group does not prescribe that the start of professional studies must be delayed until graduate school. In fact, many Holmes members have designed new education programs that students enter as sophomores or juniors and continue in postbaccalaureate studies and supervised internships. Nor does the consortium propose that new teachers must have a master's degree before being recommended for a teaching license.

Holmes Group institutions commit themselves not to a prescribed structure for teacher education, but to making professional programs for school educators--initial preparation through continuing education--a central mission of the school of education. This entails critical rethinking of the existing content of professional preparation programs. It means working with liberal arts professors and with practicing teachers and administrators to devise programs that are academically and professionally solid and integrated. That combination of academic and field experiences must be conceived to encourage a life of learning for educators and quality learning opportunities for students.

In the education studies curricula, all Holmes institutions emphasize the knowledge that has been gained in recent research on learning and teaching, and personal application of that knowledge in carefully studied circumstances in the schools. The structures of the programs vary, however, within and among Holmes institutions. Preparation programs accommodate both young and older, career-

changing candidates, recognizing their differing backgrounds and professional aims.

2. Recognize difference in teachers' knowledge, skill, and commitment.

Structure internships and induction-year experiences so that beginner teachers receive the assistance and supervision they need. Bring talented and experienced teachers into partnership with the university to tap their expertise and wisdom in helping to teach professional courses, to supervise student and first-year teachers' classroom work, and to participate in research at schools.

Prepare experienced teachers for advancement in their careers through leadership roles in the schools where they teach. For instance, teacher leaders may assist their fellow teachers to reflect on or reorganize or enrich their teaching, to teach in teams or interdisciplinary groups, and to participate in making the school's instructional decisions.

3. Create relevant and intellectually defensible standards of entry into teaching.

Develop multiple evaluation instruments, measuring diverse kinds of competence, for use at several stages: admittance to teacher education, admittance to student teaching and to internship in a school, and recommendation for a teaching license.

Work to prevent testing from discouraging or excluding minority candidates from teaching. We take three tacks: 1) Develop more comprehensive measures of proficiency in teaching. 2) Mount extraordinary efforts to identify, prepare for college, and recruit students of color who would make good teachers, and then finance and sustain them throughout their teacher preparation. 3) Mount similar efforts to make faculties of education more representative of minority populations.

Work for the replacement of standardized tests as licensing exams. These minimalist tests, in use in many states, have little value in predicting the future performance of beginning teachers. They do not guarantee the public of a teacher's capability to teach, nor do these exams indicate how well a teacher education program prepares teachers.

4. Connect schools of education to the schools, and

Create Professional Development Schools, and working partnerships among university faculty, practicing teachers, and administrators that are designed around the systematic improvement of practice.

These Professional Development Schools, analogous to teaching hospitals in the medical profession, will bring practicing teachers and administrators together with university faculty in partnerships based on the following principles:

Reciprocity, or mutual exchange and benefit between research and practice;

Experimentation, or willingness to try new forms of practice and structure;

Systematic inquiry, or the requirement that new ideas be subject to careful study and validation; and

Student diversity, or commitment to the development of teaching strategies for a broad range of children with different backgrounds, abilities, and learning styles.

These schools will serve as setting for teaching professionals to test different instructional arrangements, for novice teachers and researchers to work under the guidance of gifted practitioners, for the exchange of professional knowledge between university faculty and practitioners, and for the development of new structures designed around the demand of a new profession.

5. Make schools better places for practicing teachers to work and learn.

Make partnerships with the teachers and administrators in particular schools. Develop these as Professional Development Schools--regular but ambitious public elementary and secondary schools where novice teachers learn to teach and where university and school faculty members together investigate questions of teaching and learning that arise in the school.

Revise the professional education of school administrators and other professionals who work in schools so that they can recognize and enhance professionalism in teachers and work in partnership with university faculty to inquire into and invent new methods and structures for their schools.

What's different about a Professional Development School?

The term is meant to convey a school devoted to the development of both novice and experienced professionals. In such schools, experienced teachers, conscious of membership in a profession, help teach and induct new members. Also, by pulling together and demonstrating their know-how, by questioning their assumptions and routines, by taking part in research and development projects, they keep on learning to teach. They contribute their experience and wisdom to the profession's systematic fund of knowledge.

The term implies a realistic setting conducive to long-term research and development aimed at the improvement of all schooling. Ideal principles to guide the design of a Professional Development School are set forth in The Holmes Group's 1990 report, *Tomorrow's Schools*.

Teaching and learning for understanding. All the school's students participate seriously in the kind of learning that allows one to go on learning for a lifetime. This may well require major revisions in the school's curriculum and instruction.

Creating a learning community. The ambitious kind of teaching and learning we hope for will take place in a sustained way for large numbers of children only when classrooms and schools are thoughtfully organized as communities of learning.

Teaching and learning for understanding for everybody's children. A major commitment of the Professional Development School will be overcoming the educational and social barriers raised by an unequal society.

Continuing learning by teachers, teacher educators, and administrators. In the Professional Development School, adults are expected to go on learning, too.

Thoughtful, long-term inquiry into teaching and learning by school and university faculty working as partners. This is essential to the professional lives of teachers, administrators, and teacher educators. The Professional Development School faculty working as partners will promote reflection and research on practice as a central aspect of the school.

Inventing a new institution. The foregoing principles call for such profound changes that the Professional Development School will need to devise for itself a different kind of organizational structure, supported over time by enduring alliances of all the institutions with a stake in better professional education

In the five years since the publication of *Tomorrow's Schools*, the Holmes Group has been struggling with the implications of its founding goals and principles about the nation's teachers and schools for itself. How does our vision of tomorrow's teachers and schools affect the design and operation of university-based colleges and schools of education? What follows is our analysis of how university based schools of education need to change if they are to deliver on the promises made in *Tomorrow's Teachers* and *Tomorrow's Schools*.

Dedication

Kathleen Devaney
1928 – 1994

Edward J. Meade, Jr.
1930 – 1994

We dedicate this report to two seminal contributors to the Holmes Group--Kathleen Devaney and Edward J. Meade, Jr.

Kathy joined the Holmes Group early on as its first full-time staff-person. Her primary responsibility was production of the Holmes Group's quarterly journal, *The Forum*. As chief editor and writer, Kathy composed each issue, either developing and writing the features herself, or editing the work of others, or soliciting stories and articles directly for publication. In pursuit of leads, Kathy attended many regional and most national meetings, visited many campuses, and got to know many of the deans and faculty on Holmes Group campuses. Behind the scenes she served as wise counsel to the Holmes Group leadership and Board of Directors, participating in all their deliberations, producing reports of and input for meetings. She contributed to the writing of many other Holmes reports, assisted in planning many Holmes Group events, and generally served as the connection among the national, regional and campus activities. In all these capacities she came to know more about the actual working of the Holmes Group at all levels than anyone else.

Ed served from the outset as one of the Holmes Group's chief champions. First, as senior officer of the Ford Foundation, he made the initial grants that helped launch the Holmes Group, participating in the early deliberations that led to its creation. Then as private consultant he established the Accountability Review Panel that provided external evaluation and guidance to the group. Ed regularly attended Holmes Group meetings and acted as senior consultant on a wide range of matters, from organization and management to strategic planning to goal setting and vision-building. He helped connect the Holmes Group to powerful external constituencies in the foundation, corporate, association, and government worlds.

Kathy and Ed represented the best of the Holmes Group; they embodied our central hopes and aspirations. To the Holmes Group Kathy brought the instincts and experiences of a networker. She long believed that good ideas and practices in education spring up all over, that education is of necessity an intensely local affair, drawing on the hearts and minds of individuals working in particular contexts. Yet she also recognized the necessity for outside support and resources, and for methods of sharing and spreading good work from one locale to another. Her genius lay in identifying and making known what others were doing, then putting them in touch with

each other. Kathy saw the potential of the Holmes Group as a network of learners, as a kind of nationwide professional development project that linked teacher educators to one another around an exciting but difficult and complex agenda for reform. Without Kathy, this potential, founded in respect for the far-flung work of many, never would have materialized. She was the voice of the Holmes Group, the source of courage to us all.

Ed supplied a bracing, tough-minded critique of our efforts, together with an unflagging faith in our mission. In a time of deep skepticism about university professional education, he insisted on its importance. And, he believed we were on the right track with the principles we espoused. Yet Ed also pressed us continually to stay true to our ideals and to examine honestly the progress we were making, the troubles we were encountering. Every reform effort worth its name requires a loving critic who both believes in the endeavor but is willing to challenge the effort, staying alert to any backsliding and weakening of resolve. Ed was the conscience of the Holmes Group, calling it to account on behalf of its founding ideals.

Kathy and Ed were indispensable colleagues and helpmates in the work accomplished. We will continue to miss them terribly in the work ahead.

Acknowledgments

Several years of study and consensus-building deliberations culminate in this third report of the Holmes' trilogy on quality professional education for educators. The school and university faculty from over ninety leading schools of education have participated in the deliberations leading to this report, and we benefited greatly from their invaluable contributions. But from among the many who made this work possible, a number deserve our special mention.

In addition to the particular contributions of Kathy Devaney and Ed Meade, to whom we have dedicated this report, we also wish to publicly acknowledge and thank Hugh Price--formerly with the Rockefeller Foundation but now President of the National Urban League. Hugh not only encouraged our work, but helped bring together the three foundations that collaboratively funded the deliberative and empirical activities that undergird the work. Mildred Hudson of the DeWitt Wallace-Reader's Digest Fund was also very helpful and supportive, as was Marla Ucelli of the Rockefeller Foundation, and Alison Bernstein of the Ford Foundation. Their patience and continued support of our work during times of controversy and doubt were especially critical during difficult times. We owe them our sincere gratitude.

Anne Dowling and Sue Bratone at the Philip Morris Corporation deserve our thanks for helping secure funds for distribution and dissemination of our work. And once again, many faculty, staff and students at Michigan State University warrant our appreciation for their continued help with the complexities and communications associated with these intensely collaborative efforts. Gail Nutter and Brad West continued to help with the financial challenges inherent in facilitating work among multiple foundations and a great many universities, as they did for *Tomorrow's Teachers* and *Tomorrow's Schools*. Joan Eadie took the lead in managing the people and communications around our many meetings throughout the United States, with able help from Joanne DiFranco and Elva Hernandez. Dawn Gregus, Tiffany Jackson, Erin Rooney, and Michelle Topp were among the wonderful students who helped with the many office tasks, errands, and phone-fax-&-mail messages exchanged during the course of our work. But no one deserves more special recognition for her steadfast contribution to this effort than Helen Geiger. As the administrative assistant to the Holmes Group, Helen never ceased to contribute her many talents, loyal advice, and consistent help to all of the project staff, institutional members, guest advisors,

reporters and other interested parties concerned with this report. She picked up added responsibilities when other staff were unable to come through, and always did so with integrity and sincere commitment to her professional ideals. The Holmes Group Board of Directors and our membership are grateful.

Tomorrow's Schools of Education describes our hopes and expectations for greatly improved professional schools for educators. These new professional schools, "TSEs" as we call them in this day of acronyms, are the kinds of university-based education schools America needs in a time of greatly increased demand for better learning. Students today must know and do more than their parents ever did in school--and today's schools must meet higher standards than their predecessors. Educators must be better equipped to meet these increased challenges. They need better knowledge and know-how for a changing world of work in schools--and they need the modern technologies that enable them to work more efficiently *and* more effectively in the interests of the young.

Over 1,200 institutions of higher education and a growing number of non-profit corporations now educate teachers for work in America's schools. Some offer excellent preparation for those who teach. Others provide shoddy preparation that angers and embarrasses those who care deeply about the minds and welfare of America's young. Quality control over the programs that educate and screen educators remains notoriously bad and almost anyone is allowed to prepare and screen those who teach our nation's children. The voices of youngsters go unheard while adults who should act on their behalf duck the inevitable controversies that must be faced to ensure quality educators in every classroom of every public school in America. When unqualified or incompetent teachers oversee children's learning the children never fully recover.

These circumstances prompt two questions. Why do so many institutions want to prepare teachers and other educators? Why do professional educators and reputable professional schools allow those of ill-repute to continue? The answer to the first question is easy. Many people besides the quality-conscious mount teacher education programs because they are profitable. The education of teachers and other educators is big business in a nation that employs over three-million educators. Dollar signs flash in the eyes of those looking for good market opportunities. Where else can you produce something, or offer services, and not have to be accountable for the quality of the product or services? In what other fields can you ignore effects on clients or customers and pay no consequences? The reasons why the education profession and the nation's good education schools allow those of questionable integrity to continue are more complicated.

This report tackles head-on the problem of uneven quality in the education and screening of educators--and proposes what might be done to correct it. The report does not pretend, of course, to solve the problem but it launches a first offensive. It takes on the nation's

leading universities that prepare teachers and the most influential education leaders in America. Most of these institutions are permitted to offer advanced graduate training, thereby *supposedly* ensuring competence at the edge of the nation's most trustworthy educational knowledge and expertise.

Our group is made up of about 250 institutions, or about one fifth of the total that prepare and screen educators. Located in many of the nation's most powerful universities, these schools of education prepare teachers and other leaders to serve the nation's schools and to become faculty in America's schools, colleges, and departments of education. It is this one-fifth of the universities that we write about here and challenge to be TSEs.

Tomorrow's Schools of Education speaks directly to and about these 250 institutions, challenging them to become consumed with a conscience and commitment to quality, first in universities like their own and then in others throughout the nation. The universities in which these education schools reside have a tremendous effect on the remaining thousand places that educate educators in America. They develop the knowledge base for the field of education. They have great influence over the education policy that gets set in the nation. They prepare and credential--for good or ill--the nation's most influential leaders in the education field, those in schools, education schools, and state departments of education.

This report challenges these institutions to raise their standards of quality and to make important changes in all four of the education common places in their ed schools--in their curriculum, faculty, location of much of their work, and in the student body. The proposals suggest that education students have for too long been learning too little of the right things in the wrong place at the wrong time. To correct these problems a number of universities are already taking steps to:

Design A New Curriculum: Here studies focus on the learning needs of the young and the development of educators across their careers--replacing studies less focused on youngster's learning and development, organized by segregated roles for educators, and centered on initial credentialing.

Develop A New Faculty: Now a clear minority, the numbers of university faculty who are as at home working in the public schools as on the university campus will come to comprise the majority of the education school faculty. Board-certified teachers and other qualified practitioners will join these faculty as colleagues in conducting important research and in better educating the nation's educators.

Recruit A New Student Body: Before the next generation of educators retire, almost half of the nation's youngsters (46%) will be from one or another minority group. The nation's education work-force--teachers, administrators, counselors, and those who educate educators--must be more diverse than today. Programs must be mounted to actively recruit, retain, and graduate highly diverse groups of education leaders at initial and advanced levels.

Create New Locations for Much of Their Work: Instead of working predominantly on campus and occasionally in schools across the American landscape, the faculty and students will do much of their work in *Professional Development Schools*. These are *real* public schools selected and joined in partnership with the university for their innovative spirit and serious intent to improve the quality of learning for educators and students.

Build A New Set of Connections To Those They Serve: Long too remote from the professionals and public they serve, the education schools will together form an interconnecting set of networks at local, state, regional and national levels--to ensure better work and accountability.

Working through the leadership in their education schools, the institutions organizing this report call for a nationwide effort to reexamine and step up the universities' contributions to the schools. The universities that develop education knowledge, influence education policy, and prepare teachers and other leaders for our nation's schools and education schools must overcome "business as usual" to meet the challenge of these truly unusual times in education. The indisputable link between the quality of elementary and secondary schools and the quality of the education schools must be acknowledged--and we must respond.

A New Beginning

America worries deeply about its elementary and secondary schools, a concern that ultimately must reflect on the institutions that prepare teachers, administrators, counselors, and others who work in those schools. Much like the nation's automobile industry, university-based education schools long took their markets for granted--in turn, giving insufficient attention to quality, costs, and innovation. And so we expect that universities cannot help but squirm as they ponder the implications of this report, detailing how they have gone awry and what they should do to reconstitute themselves.

No one dons the hair shirt of self-criticism for reasons of comfort. In effect, the Holmes Group, a consortium of universities doing educational research and educator preparation, acknowledges by publishing this report that its member institutions, despite hard-won improvements, need to make further strides. This concession, however, should come as no revelation. The ills of American education are cited from the roof tops. The record of more than a decade of education reform leaves the public deeply concerned about its elementary and secondary schools. People have little confidence in the questionable remedies grasped by those who think almost anything will be better than what exists.

The sense of desperation is fueled by the mood of a frustrated public who believe that the nation will pay dearly if the schools don't improve. They read reports telling them that American students compare unfavorably with peers in other countries. They realize that only limited numbers of low-skill jobs are available for students who leave high schools because of failure, boredom, or economic need. They know that tens of thousands of students who were processed through high schools must take remedial courses in college. They hear about a high-tech future for which they worry that their children are not being adequately prepared. They wonder about the ability of the public schools to accommodate the needs of poor children, minority children, gifted and talented students, pupils with disabilities, and children of limited-English proficiency. Repeated urgent calls for education reform have convinced Americans that a challenge of unprecedented proportions confronts the schools.

Universities must share the blame for the perils, real and imagined, facing the public schools. Like the auto industry before them, universities will have to restructure and make drastic adjustments. They will have to change the ways in which they educate professionals for work in the public schools. One may argue, of course, over

the degree of culpability that higher education bears for the ills of schooling, for certainly the schoolhouses of America are not solely the dominion of educators. Society itself casts a powerful and pervasive spell over the classroom and educators must struggle mightily to overcome the most negative of societal influences. But no amount of excusatory rhetoric can exonerate the universities from a share of the responsibility for the shortcomings of public education. Realistically, discussions of how to improve the schools must take account of the people who make their livelihoods in the schools--as well as those at the university whose careers involve educating school professionals for that work.

The United States, after all, devotes a substantial portion of its higher education programs to studies that result in the awarding of academic credentials for educators. Education schools contribute to some 10 percent of all bachelor's degrees, 25 percent of all master's degrees, and 20 percent of all doctoral degrees--degrees that go to people who work in the nation's schools, universities, and social and governmental agencies, and a variety of institutions. And in a good number of cases, universities allocate insufficient resources to programs preparing these people even though the resulting credentials produce employment and increased pay for educators. It is unclear, though, how this arrangement leads to better schooling and better learning in America's elementary and secondary classrooms.

We begin this brief with a radical premise: institutions preparing educators should either adopt reforms that link their educational contributions closely with improved schooling for America's young--along many of the lines proposed in these pages--or surrender their franchise. More of the same on the part of universities and their education schools cannot be tolerated and will only exacerbate the problems of public education. Schools of education, after all, accepted responsibility for the preparation of school professionals early in this century and are partners in a social contract that they must abrogate if they are unable to fulfill their end of the bargain. Society relies on education schools to help improve the schooling of children, but of what value are education schools if they prove unable to contribute significantly to enhancing the quality and social responsiveness of elementary and secondary education?

We assume this drastic stance precisely because we believe that the country needs university-based education schools and that they can make a difference in the teaching and learning of children. In fact, some institutions already have stirred the winds of change and are now making such a difference. But most others have yet to demonstrate a commitment beyond the appearance of change. Schools of education that reexamine their societal contribution to each new generation of young citizens and refocus their mission accordingly

can, indeed, help solve the problems that afflict the public schools. This means not only proclaiming worthy goals, but also developing sensible strategies, making sound contributions, and setting standards of accountability. The Holmes Group commits itself as an organization to being part of this response. For if we don't join others in answering the challenge, we fear for America's ability to lift the fortunes and improve the learning circumstances of the young.

The United States has been awash with education reports and proposals for change since the nation declared itself educationally at risk in 1983. Spending for elementary and secondary education during the intervening years swelled by more than 40 percent in inflation adjusted dollars and while some promising signs of progress are apparent, the "rising tide of mediocrity" still threatens our schools. Most of what happens in many schools today remains caught in the undertow of the status quo. Changes, by and large, flitter at the margins, touching only the edges of teaching and learning.

Action must replace inertia. The education school should cease to act as a silent agent in the preservation of the status quo. By offering courses and awarding degrees to educators in the absence of demonstrated evidence of ability and without a commitment to apply what we currently know from research and theory, the university tacitly affirms current practices. As a preparation ground for professionals, the education school must act as a partner with innovating schools to prepare and screen educators in settings that exemplify trustworthy practice. And as a preparation ground for professionals, the education school must unequivocally embrace the kind of academic preparation that readies one to work comfortably with the ideas and technologies appropriate to an advanced society on the brink of a new century. Medicine delves into the molecular level, architecture renders on computers in three dimensions, law searches for precedents on LEXIS. Many professions and occupations have been altered to such an extent that neither practitioners nor future practitioners can afford to cling to old ways. Meanwhile, far too many of those who prepare teachers and other educators continue to dwell in a bygone era, guided by outmoded conceptions of teaching and learning, and not conversant with the nature of professional work in schools.

Too many education schools maintain low standards for the public schools in which their students carry out apprenticeships. They often place students in schools where the conditions of work are almost identical to those encountered generations ago. In these outdated schools the dominant work confines teachers to isolated classrooms and the primary technology remains chalk and eraser though the slate has turned from black to green. These future teachers and principals learn in schools where understanding is sacrificed at the

altar of coverage and knowledge is measured through the expediency of true/false, short-answer, and multiple-choice responses. Some universities still allow their education students to learn exclusively in monocultural schools when today's educators must prepare themselves to educate the most highly diverse culture on earth. Relevant university theory on individual differences has little effect, even if taught well, when apprentices get their first taste of teaching in schools that remain disconnected from the real lives and needs of children, particularly minority, poor, and non-English speaking children. The university's standards for field placements must acknowledge the diversity of America's next generation, recognizing that many schools today house a Babel of languages among their pupils.

Research and development studied by future educators in university classes fades quickly when mentors in the schools show disdain for such knowledge, or when school policies and practices run counter to the ways the university faculty claim they should be. The university faculty and the schools with which they form partnerships must ensure that theory and practice converge. For educational knowledge to be useful to future and practicing educators, it must first be credible and effective in helping them think and act more successfully in the interest of youngsters' learning. The school of education must link its educational research and development to the service of school improvement and to the preparation of university students who will learn and be evaluated for their knowledge of the changing roles and responsibilities in the schools.

Kansas State University's Colleges of Education and Arts and Sciences have entered a partnership with the Manhattan-Ogden School District to transform teacher preparation and the district's elementary schools. The venture is based on the premise that education should be viewed as a continuum from kindergarten through university, and that improvement in one part of the system is not possible without improvement throughout.

The enormity of the challenge that society poses today requires indomitable effort on the part of educators. Schools and education schools must address these challenges. Many children arrive in elementary school lacking the bare essentials of good health. The media seduce children with messages of immediate gratification. Illicit drugs poison their will and violence cuts them down before puberty. Youngsters hardly finished playing with dolls bear children. The old order will not suffice.

In a world that has changed, education schools, too, must change. School professionals must now learn to educate effectively a new breed of student. Many of those who would have become dropouts in former years now remain enrolled. Academic demands have risen and instructional strategies must be adjusted to fresh realities. Research in education and the cognitive sciences sheds new light on ways to improve student learning and understanding. Those who go into the public schools to make their careers must know how to provide the best possible education to a cross-section of children who personify a new America.

Simply put, the need for greatly increased, higher quality teaching and learning expands at a rate much faster than the education system's ability to offer better teaching and learning. While some achievement statistics have improved, the performance of too many students resembles a swimmer who treads water just enough to keep from going under. Some youngsters confidently carry themselves far out into the academic sea with bold, sure strokes while others risk being swept away by the next wave. The country cannot afford such uneven performance among its students. The education system has to discover and implement ways for many, many more to catch up and maintain the pace. This is why the Holmes Group and many others advocate the formation of Professional Development Schools to increase the amount and influence of educational research, development, and demonstration addressing the needs of America's children, especially those at greatest risk.

The kind of far-reaching change needed to deal with new situations requires concentrated and coordinated reform that cuts across many parts of the system at once. Piecemeal reform has proven inadequate because of the web of connections among the system's various parts--curriculum, pedagogy, assessment, texts and materials, and professional development, for example. All of these parts must be tied together. Attempts to change only one part at a time are obstructed by the stasis of the larger system. Imagine, if you will, a new math curriculum that calls for a different kind of teaching so as to stress problem-solving, a curriculum in which performance assumes the dual character of both learning the material and being assessed on one's learning. New books and materials and more demanding instructional assignments are other pieces that make up this puzzle. Ideally, the pieces will fit together so the picture makes sense. Successful improvement requires coordinated changes in all of these various parts.

Changes of the kind we describe depend on the knowledge, skills, and dedication of the professionals charged with carrying them out. If education schools do not equip school professionals to perform in new ways then as surely as fifth grade follows fourth grade most

educators will continue to regard teaching as show and tell, learning as passive listening, knowledge as a litany of facts, tests as memory samples, and accountability as something about which only students must concern themselves. If the education school continues to equip people for organizing and managing schools as the factories of old, plans for improvement will be dead on arrival.

How can university-based schools of education stand by and not lend their support to those in the public schools who struggle to overcome practices and policies they know are hopelessly dated? Some education schools, joined by their counterparts in the arts and sciences, have begun developing innovation sites in Professional Development Schools. But support for broadscale outreach to the schools is inadequate even as policymakers mouth the expectation that students, regardless of race, gender, ethnicity, or social class can and must learn and that educational institutions will make fair and reasonable opportunity for such learning. Little changes, even though new understandings from educational research provide insights about learning and about ways in which it can be brought about more effectively to meet ambitious learning goals.

Elementary and secondary schools must transform themselves into places where teaching and learning take more complex and more flexible forms, where teachers guide students in the development of curiosity, and where teachers engage students with important ideas that enrich their daily lives. Such learning is not the stuff of drills and worksheets, but of learning rooted in rich experiences for students. Technology in all of its glorious manifestations can perform as a partner in promoting learning of this sort. But the public remains largely unaware of these possibilities because too few examples are available for them to observe as a new norm.

If members of the Holmes Group and other leading colleges and universities in each of the 50 states joined in partnership with the state's most innovative elementary and secondary schools to foment bold but responsible change in education, then surely the public would know and understand that a learning revolution was under way. The public has already seen abundant evidence of the capacity of the great universities for research and innovation in a host of areas. Collectively, the universities and the schools that educate educators--working together to ensure that research and development guides and accompanies change--could push aside the boulders that block the path of change in the public schools. A field that accounts for a tenth of our nation's undergraduates, and almost a quarter of our nation's graduate students will have significant impact if it rises to the challenge. It is time for the universities to weigh in on the side of elementary and secondary education as they have done for medicine, engineering, agriculture, management, and

other fields. It is time for universities to modify whatever policies they must concerning research, teaching load, and tenure to make these changes in quality possible.

For the universities, altering the way they go about educating educators means a reordering of priorities. Universities are accustomed to conducting research and development activities on behalf of other fields, but they give short shrift to the study of teaching and learning as it is carried out in the public schools. Furthermore, the research of education schools disproportionately concerns itself with describing the troubles of the education system as it now operates, rather than exploring new avenues for more fruitful teaching and learning. Universities will have to redirect their investment in education R&D to take account of long-term applied work on what needs to be done to improve the public schools. Also, they must confront the schism between educational research and educational practice.

As matters now stand, especially in many of the most research-intensive institutions, the faculty who get time and opportunity for educational research often have little responsibility for preparing practicing educators and may, in fact, hold teacher preparation in disdain. Meanwhile, the faculty members involved predominantly in teacher preparation get little if any time to conduct research on the problems of teaching and learning and hardly any encouragement to study and develop solutions to these problems. As a consequence, too many faculty members educating teachers have limited entree to the study of the most serious problems of the schools and do not investigate the innovations that might remedy such problems. And while all professional schools struggle with the distancing effects of academic specialization and the subsequent loss of concern about and understanding of broad societal problems, education can ill afford this lack of connection. Education is an expansive public undertaking in America and requires broad study and clear application of its inquiry to the problems of practice.

Universities and their education schools let down America when they fall short in these ways. Public education, to a great extent, becomes what higher education leads it to be through the educators it prepares and the knowledge and tools it contributes to school improvement. Just as medical schools created teaching hospitals and agriculture schools created experimental stations and extension services to lead their fields in significant ways, so too can education schools fashion new mechanisms for aiding elementary and secondary education.

All of this is not to say that serious participation in education renewal by some colleges and universities and by individual faculty members has not been noteworthy or appreciated. Or that government,

corporations, and philanthropic foundations have not participated in trying to simultaneously improve schools and education schools. These contributions, however, emerge in stark relief against a larger background of business as usual in far too many university-based schools of education. Elementary and secondary schools and their education schools require something more extensive and more enduring than casual connections. The public schools need the aid and collaboration of colleagues from higher education who regard the schools as professional education's paramount concern--and the professional schools need the aid and collaboration of colleagues from elementary and secondary education who value quality educational research and professional education.

Work by teacher educators from the University of North Dakota's Center for Teaching and Learning with Lake Agassiz Elementary School in Grand Forks has constructed curriculum increasingly responsive to student interests as documented through portfolios and parent consultations.

Thus, the member institutions of the Holmes Group rededicate themselves to the renewal of professional education for those who work in America's elementary and secondary schools. We will join other universities and schools that share our commitment to ensuring that youngsters throughout our states and regions have opportunity to learn from highly qualified educators. This means that students in education programs must experience learning environments where learners search for meaning, appreciate uncertainty, and inquire responsibly so they can recreate such circumstances for their own students. It also means that our graduates must possess the ability to provide the knowledge and skills needed to give even the most downtrodden children the opportunity to advance through education. The public schools remain the last best hope of this country and in setting the following goals for Tomorrow's School of Education we launch a crusade in quest of exemplary professional practice:

Goal 1 – *To make education schools accountable to the profession and to the public for the trustworthy performance of their graduates at beginning and advanced levels of practice*

Competence in subject matter requires that education students experience first-rate learning in the liberal arts. Some colleges and universities still offer prospective educators watered-down studies in

the arts and sciences, especially at upper levels. Sometimes they segregate education students from others studying the same discipline or provide them with less challenging content or don't give them the chance to study with leading professors in the disciplines. Prospective educators taking a content course in English or chemistry or mathematics should sit alongside liberal arts majors even at advanced stages. Education credentials should not be printed with shoddy ink. The TSE will therefore refuse to admit or recommend for a teaching license any student whose studies in the arts and sciences have been diluted in any way whatsoever.

Likewise, the education courses for those who will teach must be of high quality. Learning must be based on the best available research about how to teach subject matter, how to tailor it appropriately to the understanding of the youngsters, and how to evaluate and improve their instructional outcomes. To ensure that graduates can sustain high standards of practice the TSE will provide internships in PDSs where students enjoy exceptional opportunities to learn and to demonstrate quality practice. Recommendations for degrees, licensure, or certification will rest on performance assessments made by school and university faculty who are themselves accomplished practitioners. Concern for the trustworthy performance of our graduates will not be limited to the initial preparation of educators, but will pertain to TSE students at advanced levels as well. Our doctoral students will apprentice in research and teaching with faculty who are proven masters in both.

Goal 2 – *To make research, development, and demonstration of quality learning in real schools and communities a primary mission of education schools*

We will bridge the pernicious gap between researchers and practitioners by conducting much of our work in real schools and communities. School and university faculty will collaborate regularly in sustained educational inquiry over time, much of it in schools educating at-risk youth. Our PDSs will connect much of our TSE inquiry to the teaching and learning of young students as well as to the professional development of novice and veteran educators. Many of our recommendations in this report cannot be achieved in the absence of the PDS, for it functions as a place where the best from our current research is applied to the everyday events of teaching and learning, and where promising new possibilities are developed and tested over time.

Goal 3 – *To connect professional schools of education with professionals directly responsible for elementary and secondary education at local, state, regional, and national levels to coalesce around higher standards*

Educators need professional development of high quality from the time they enter their initial programs and throughout their careers. The only way each future generation can be better educated than the last is to have educators continuously engaged in quality learning. Advanced studies at the university and continuing professional development in the schools must be first rate--informed by the best we know from research and study, as well as from documentation of wise and effective practice. At the local level, starting with at least one PDS, the education school will build a network of these precollegiate institutions as places where TSE students learn and are evaluated for professional practice in the context of ongoing school renewal. The PDS, not just any elementary or secondary school, functions as a place where prospective and practicing educators from the school and the university immerse themselves in a sea of inquiry in pursuit of ever more effective learning. These local partners join with other professional schools and groups of educators at state, regional, and national levels to accumulate trustworthy educational knowledge, and to encourage its inclusion in professional development programs, performance assessments, and in standards for licensure, hiring and promotion.

Goal 4 – *To recognize interdependence and commonality of purpose in preparing educators for various roles in schools, roles that call for teamwork and common understanding of learner-centered education in the 21st century*

Because success in the future will depend on an ability to collaborate on behalf of every youngster's learning, we will no longer prepare educators for isolated roles. Instead, we will get them ready to work together on behalf of children in learner-centered schools and communities. Administrators, counselors, teachers, and other faculty influencing the learning and development of youngsters from early childhood through adolescence need opportunity to study and develop common language and understandings. They also need the chance to prepare for interaction with others whose work affects the lives and learning of the young, others whose professional work is often most needed for the learning success of students at educational risk. Thus, we will develop a core curriculum for educators at initial and advanced levels, and encourage experience and study across the various professional educational fields.

Goal 5 — *To provide leadership in making education schools better places for professional study and learning*

We will ensure that our faculty are competent teachers and researchers, comfortable in both college and school settings, and committed to an education of quality for all children in an interdependent world. Our faculty and student body will come to reflect the rich diversity of American society and our education schools will offer a curriculum that all can respect. We will strive to see that outmoded and faulty assumptions about teaching and learning no longer determine educational policies and practices in our respective states and across the nation. With our practicing professional colleagues, we will set new standards for our professional schools, see that our own institutions meet them, and work to develop policies that require all schools of education to achieve high standards.

Goal 6 — *To center our work on professional knowledge and skill for educators who serve children and youth*

We will sharpen our focus and concentrate our programs so that we offer studies more closely aligned with the learning needs of children and youth in a democratic society. Many schools of education have been trying to do too much with too little, dividing their curriculum into a succession of sub-specialties and stretching themselves too thin. Education schools trying to be all things to all people fail everyone. Our priority will be on program quality for those working to improve learning for children and youth. To sustain or increase the program quality needed to address rising standards in the nation's schools, TSEs must judge their offerings in terms of the collective contributions they make to the educators who serve each new generation of young citizens, including contributions to educators who address the learning needs of the poor.

Goal 7 — *To contribute to the development of state and local policies that give all youngsters the opportunity to learn from highly qualified educators*

The value of the education school rests, in part, on its ability to contribute knowledge, information, and policy analysis that leads to informed decisions about educational quality. This requires checkpoints along the path—at admission and throughout preparation, licensure, hiring, certification, and professional development. Schools of education must promote standards of quality in their home states and oppose forces that allow youngsters to be "educated" by less than fully competent, caring professionals.

The Heart of the Matter:

Three Kinds of Development

Tomorrow's Schools of Education (TSEs) must place children first and, in so doing, underscore a commitment to emphasize the connection of the TSE to the education professionals closest to the students, those in elementary and secondary schools. It may seem odd for this report to speak of stressing the TSE's mission to serve children and youth. Isn't that what schools of education have always done? Not necessarily.

Ambiguity surrounds the purpose of schools of education. Many of these institutions have been less than clear about their mission. The confusion arises, largely, from the tendency of many education schools to support too many different programs and to invest too little in work with the schools. As a consequence, a disproportionate number of faculty members separate their work from that of the elementary and secondary sector. Many professors go about their teaching and research with hardly a nod toward the public schools, seldom if ever deigning to cross the thresholds of those 'lowly' places. Such attitudes transmit an unmistakable message. The people most intimately responsible for children's learning in elementary and secondary schools are not sufficiently valued by the education school. Schoolteachers and young learners, who should be the focus of the education school's concern, are kept at arm's length. They are a sideshow to the performance in the center ring, where professors carry out their work insulated from the messiness and hurly-burly of elementary and secondary education.

Schooling in America cannot renew itself so long as the links between universities and public schools languish. Dysfunction, instead of healthy symbiosis, characterizes the relationship between many university-based education schools and the schools. Sustained involvement in the public schools, predicated on mutual interest in the learning needs of children, must become an enduring feature of the TSE. For this to happen, a good number of professors in schools of education must identify not only with their disciplines but more actively with the public schools themselves. Research in the education schools should be directed toward groundbreaking work on matters involving both the creation and the application of knowledge. This will require a shift in many places, and necessitate reorienting the faculty reward system in the education school and in the university. Scholars who respond favorably to this call for more involvement with elementary and secondary schools and for more research into applying knowledge must suffer no penalties for their pioneering efforts so long as high standards are upheld for their work.

The education of teachers has become a major focus of research and teaching agendas of faculty throughout the Graduate School of Education at Rutgers University.

In their rush to emulate colleagues in the arts and sciences, many faculty members of education schools lose sight of their responsibilities and opportunities as part of a professional school. Traditional forms of academic scholarship have an important and proven place in professional schools, but such institutions are obliged, as well, to learn from practice, and to concern themselves with the scholarship of applying knowledge. Teacher education and investigations connected to teaching and learning in the public schools must hold central positions in the TSE. Like schools of medicine, dentistry, law, business, architecture, and veterinary medicine, for example, a school of education should properly explore issues involving the practice of the profession. Tomorrow's Schools of Education must not try to garb themselves in guises that hide their true identity as professional schools. They will wither into deserved irrelevancy if they are unwilling to stand up and display their concern, above all, for children and their learning.

The voices heard most frequently amid the ferment surrounding elementary and secondary education are not those of faculty members of the education schools, but those of business people, politicians, and policy analysts. Some university educators speak out about the public schools, but they are few. The TSE needs to muscle its way aggressively into the fray. By hitching its wagons to public schools that are striving to transform themselves into Professional Development Schools, the TSE can ensure that the experiences of practitioners who are closest to the day-to-day learning of children figure more prominently in the great debate. To these ends, every TSE should embrace and conduct quality work on three complementary agendas--knowledge development, professional development, and policy development.

The seeds for developing knowledge take the form of investments in basic and applied research. Then, like all good scholars, educational investigators screen and document that research, cautiously estimating its value and the extent to which generalizations may be drawn. Professional development results from creating new meanings and layering on coat after coat of knowledge, gradually building up expertise that is both deep and strong. The process begins with selecting and preparing future educators and then by adding to their advanced and continuing education. Finally, policy development emerges from a synthesis of this knowledge and professionalism to

produce thoughtful and sober analysis, constrained by guidelines that promote educational quality and provide protection from untrustworthy practices.

Knowledge Development

An essential and defining feature of the TSE is its production and application of new knowledge. In paying more attention to the public schools, the schools of education will inevitably reposition themselves to extend more of their knowledge development beyond the Academy and closer to the lives of youngsters. Previous investments in knowledge development by schools of education have, to too great an extent, remained tangential to core questions regarding teaching and learning in elementary and secondary schools. Research that is relevant and accessible to practitioners holds the greatest promise of transforming the field.

Professional education, in general, does not always discharge this responsibility as diligently as it ought to. Research by architecture faculty, for instance, may not take sufficient consideration of users; research by medical faculty may not take sufficient consideration of patients; and research by law faculty may not take sufficient consideration of clients. Faculty members in a professional school must remember always that their profession exists because it produces a service for someone. Without its clients or patients, the profession loses its *raison d'être*, and study of the disciplines in arts and sciences suffices. The 'inconvenience' of having to apply and study the apparent value of new knowledge and technologies over time in real contexts, and with real clients, is avoided. But scholars who follow this route ignore the recipients of the profession's service at a certain amount of peril. A profession disconnects itself from its lifeblood to the degree that the research severs its links to those who are supposed to receive a service. This reality, then, should shape the essence of professional schools for educators as we see them.

Fortunately, the Professional Development School (PDS) movement that we and others advanced in the late 1980's has taken root and promises to grow into something substantial that can cast its nurturing shadow over more and more of the education enterprise, allowing knowledge development to take greater cognizance of teaching and learning in elementary and secondary schools. Inquiry in the PDSs challenges the traditional relationship between research and application and gives promise of creating a new conception of that relationship.

For one thing research in the PDS is conducted in the real context and complexity of educational practice. This tends to make research and application inseparable. Researchers create instructional envi-

ronments in accord with particular theoretical principles. The creations are not only real instruction, but they are also experiments. Researchers collect data in these circumstances, using it both to correct their theoretical ideas and to improve instruction itself. Many researchers who use this method create such instructional environments in direct collaboration with teachers, and some of these "experiments" last for a semester or a year or longer. Such extended studies require the collaborators to monitor progress and problems all along the way rather than merely administer some kind of test at the end. No one has to figure out how to apply the research because it emanates from practice.

Another conception of educational research makes collaborators of teachers and other practicing educators, building on their intimate knowledge of learners in the context of particular schools and communities. Documentation of their observations and interventions into the learning lives of the young promises new insights and a synergy that some researchers argue may transform the field of educational knowledge. The PDS therefore represents a source of hope for those who want to see the knowledge mission focused closer to the thoughts and learning experiences made available to genuine young learners over time. The tie of research to the PDS opens a broad new avenue for the TSE to follow in collecting, evaluating, and demonstrating in practice the best of what is learned from new lines of study, or what is gleaned from traditional research and applied in a variety of circumstances. Already, in a good number of incipient Professional Development Schools, schools of education share the benefits of knowledge development and application with prospective and practicing teachers.

The University of Arkansas College of Education funds university/public school collaboration to study various educational practices. They have examined the effects of cooperative learning on attitudes of middle-level students, classroom management strategies for elementary students, a parent-child take-home drug education program, and field-based and campus-based methods courses on the reading orientations of prospective teachers.

Experienced and beginning teachers do not learn about research by reading articles or listening to lectures alone. They learn by seeing research findings applied by others, talking about questions and findings with like-minded colleagues, and by developing knowledge themselves. The PDS offers a venue for such opportunities to novice

and veteran practitioners alike. In such a setting, knowledge of change and how to bring it about bursts beyond the confines of library shelves. Practitioners and those who collaborate with them evaluate and disseminate research-based ideas, practices, and tools by using them in the PDSs. By highlighting these emerging lines of educational research we do not seek to denigrate the other forms of educational inquiry in and outside PDSs that are also valuable. We are not trying to be exclusionary, but only to note emerging work that holds promise for a field that has historically slighted improvement-oriented work, teacher perspectives, and long-term study of youngsters' learning in the schools.

Professional Development

University-based education schools inadvertently contribute to the de-intellectualizing of teaching when they favor professional development programs that accord greater prominence to non-teaching roles or when they minimize the importance of deeper knowledge for those who remain in positions in the classroom. This happens, for example, in programs that claim that prospective teachers can learn to bring about quality learning for groups of diverse young clients in a variety of subjects by simply having these future teachers take some university courses in methods and foundations and then apprentice for ten weeks with a supervising teacher unknown to the university. This approach contrasts sharply with the education school's requirements for counseling psychologists that call for extensive advanced study and selected placements to gain experience with highly qualified mentors. Such differences in expectations imply that classroom teaching represents only a "starter position" and that serious educators study substantial knowledge only in connection with higher level, non-classroom assignments. The folly of this reasoning sustains a dangerous hierarchy in public education and suggests that those at the bottom--the classroom teachers--should not trouble themselves with the deeper theories of teaching and learning, matters best left to curriculum coordinators, other specialists, and administrators.

The TSE posits a different philosophy--that teaching must be regarded as intellectually challenging work and that prospective and practicing teachers should be people capable of making informed professional judgments. This philosophy suggests that TSE faculty will collaborate with their PDS partners to adapt and recreate the role of teacher so that those in the position have greater opportunity for reflection, thought, and collegiality. This idea applies to teaching at all levels of experience. Teaching should infuse itself with intellectual challenge from the outset of preparation through the length of one's entire career in schools and classrooms. The TSE will treat

the prospective teacher as one expected to delve deeply into the intellectual side of teaching and learning. Thinking, judging, deciding, adapting--all are part of the ethos of teaching, minute by minute, day by day, year by year. The status of those working in the public schools suffers when they are excluded from policy decisions and treated like instructional robots.

The blame for denigrating the teacher's role rests not only with the school of education. If the education school has been preparing people for routine work in the classroom that is largely because teachers were not permitted to do more. Schools that now take the professionalism of teachers more seriously afford them opportunities to make judgments and to participate actively in the development and implementation of education policies. In the more enlightened school districts, teachers are now prepared and encouraged to participate as primary players in curriculum selection, standards development, evaluation design, and other areas that call for professional judgment. But many principals, school boards, superintendents, state education agencies, and federal policy makers still downplay teachers' professionalism even while paying lip service to the concept. Schools of education must no longer lend themselves to this disturbing denigration of teachers.

Fresh evidence attests to the importance of teacher judgment and to the necessity for teachers to tailor curriculum to suit individual students, a practice that certainly demands professionalism. This new foundation for enriching the intellectual life of teachers--to which the research of some teacher educators has importantly contributed--provides a basis for a fresh start in how society regards its teachers. Increasingly, schools of education recognize that the professional knowledge of teachers must be built on more than how-to admonitions for keeping order in the classroom. Substantial issues of teaching and learning have to figure more prominently in the knowledge base of teachers. Schools of education must strengthen their alliances with school districts and states so as to ensure that those whose preparation equips them for decision-making receive the chance to exercise discretion in regard to appropriate professional practice.

It makes abundant sense for the professionals in closest contact with youngsters, those well educated by an education school, to make judgments about the education of those children. When this happens, students in elementary and secondary schools gain in two ways. First, the professionals who know them best will decide more of the details about their education, immediately matching practice to learning needs. Second, only by respecting the teacher's mind will the public schools be able to compete for more of the best and the brightest candidates and then be able to hold them. Smart peo-

ple don't want to be treated as mindless ninnies. They are most apt to consider teaching if they perceive it to be a job for thinkers. The ablest college students, those for whom the public schools would like to vie, want jobs in which they can grow intellectually. Thus, the need for teachers' continuous learning and development throughout their careers calls for universities to rethink their roles and relationships to schools in regard to continuing professional development. If educators no longer need to leave teaching to advance as professionals, then the entire continuum of advanced professional education must be reconsidered.

Policy Development

The new TSE merits a place at the table where policymakers gather even if it has been omitted from the invitation list in past years. These are new times and policy-driven efforts to improve education are too important to cede to representatives of government and business, who seem to have taken up many of the chairs in recent years. If the TSE elevates the needs of children to unprecedented levels of concern, as we advocate, then surely the added attention to elementary and secondary schools and the resulting interest in professional development and in knowledge development for school-based educators ought to help insert the TSE more actively into the debate about public education. These contributions to policy can arise from two sources within the TSE. On the one hand, research that ties itself more closely to the most pressing issues in precollegiate education will lead the way to policy insights. On the other hand, simply by immersing themselves deeper into the everyday issues of elementary and secondary schools, faculty members at the TSE will be more in touch with the most pressing issues.

Policy Analysis for California Education (PACE) is an independent, nonpartisan education policy research center in the School of Education at Berkeley. Collaborating with education faculty from Stanford and USC as well, PACE informs policymakers, educational professionals, and the general public by researching and analyzing issues facing California's K-12 education system. The Research and Development Center established at the University of Delaware, with help from the state's Business Public Education Council, models itself after PACE. The director of the center is a member of the education faculty and the state superintendent's cabinet.

In making this argument, we don't mean to exaggerate the TSE's importance in policy development. By itself, the TSE cannot remedy the social and economic circumstances that conspire to undermine the good intentions of the schools. The roots of some of the problems run so deep that even the best insights of professors at the TSE or of experts from any other sector might only begin to lay a foundation for solutions. Furthermore, the idea should not be for the TSE to try to hold itself out as a font of all knowledge, but for it to combine its wisdom with that of foundations, think tanks, and, yes, business and government, to help elementary and secondary education set a course that will avoid some of the shoals of the past. We believe that the newly-constituted TSE will have much to offer in this regard.

Surely, though, policymaking in education can only benefit from the input of informed faculty members of the TSE. Individual professors have long been involved in policy work, but we envision institutionalizing this function and making it a formal part of the mission of the TSE. Quite possibly, consortiums of education schools will collaborate on some of these activities to avoid needless duplication of programs. At some point, for instance, schools of education in the same state must almost certainly develop policies together to coordinate their recruitment of new students and to tie their credentialing programs to the needs and realities of the public school marketplace. The policy collaboratives we discuss later in this volume address this need.

However they decide to pursue the development of policy, this activity should be a major item on the agenda of TSEs. Like their colleagues throughout the departments of the university who influence public policy on transportation, labor, housing, and health care, those who educate educators should similarly strive to bring their expertise to bear for the public good. Precisely because we expect faculty members of the TSE to be experts in teaching and learning, we believe they can add valuable points of view. They certainly would do no worse than some of those whose influence has been greatest until now. Look at the impact of current policy initiatives: the nation's schools have gotten mandated tests for student promotion, ability tracking, minimum basic skill tests for teachers, moments of prayer, and use of the SAT for purposes for which it was never intended.

Daily decisions in Congress, in state legislatures, and in school districts could gain from enriching the mix of ideas considered. Universities and their education schools can play a fundamental role in this process, supplying reliable and impartial knowledge as a basis for policy formation. The public desire for greater quantities of

quality learning will remain unfulfilled without acting on the basis of what we know. Analyses provided by the TSE could help influence future directions in school finance, performance assessment, teacher testing and hiring, and a host of other areas. Legislation to increase the granting of emergency teaching licenses, for instance, has bubbled to the surface in some states. Lawmakers need and deserve to know about the synthesis of policy relevant to this subject. The TSE can help. It also can oversee, pilot, and test versions of programs that might be studied as a prelude to legislation.

Thus, knowledge development, professional development, and policy development lie at the heart of the education school's mission. Virtually everything the institution does will be shaped by these three fundamental concerns. In this regard, the TSE stamps its imprimatur on the educator as a professional. This approach distinguishes schools of education from trade schools. The TSE equips its graduates for careers in which their work can be respected for the depth and range of intellect it requires. The TSE equips them for decisions about knowledge that stem from a willingness to set priorities for teaching and learning, and it equips them for practice that provides insight for pertinent policy formation. Perhaps most important, however, the TSE grounds its critical examination of knowledge development, professional development, and policy development by connecting it to the public schools and to the long-range effects of schooling on young learners.

Special Knowledge for Educators

University-based education schools should devote themselves to producing knowledge and putting it into the heads, hands, and hearts of educators. The creation and sharing of knowledge, after all, lies at the very core of the university's existence. These institutions already make substantial investments in the advancement of knowledge for the betterment of society in many other fields. Why not in education as well? Imagine the impact on elementary and secondary schools if the nation's universities that already award a quarter of all of their advanced degrees to educators--turned their attention to harnessing knowledge in behalf of the public schools too--not unlike what they have done for medical science, physics, agriculture, engineering, business management, the humanities, and the social sciences.

Right now, some universities go through the motions of educating school professionals without taking the crucial steps that would connect that education to trustworthy knowledge about the renewal of elementary and secondary schools. A vigorous move to further research-based knowledge, its connections to practice, and its inclusion in the full range of professional programs for school-based educators would lead to better education for all children. Such a commitment would demand closer attention to lodging research and development in real classrooms, in the places where teaching and learning actually occur for youngsters from preschool through high school. It would also call for greater collaboration among the research universities and other institutions that educate educators.

Outsiders frequently misunderstand schools of education in terms of their potential contribution to the knowledge and expertise of professional educators, their value-added function, so to speak. The public and much of the university itself harbor suspicions about education schools and wonder whether they serve a useful purpose. Teaching, according to the average citizen, involves merely knowing something and explaining it to others. Can't any reasonably intelligent person with a decent general education carry out this job without special training? Perhaps a few courses in classroom management might help, but all those other education courses? In truth, education schools have failed to make their case. The public actually wonders, if they stop to think about it, why the country needs schools of education. People understand the utility of studying an academic discipline in college and doing some practice teaching in

the school, but the rest of what happens under the auspices of the education school baffles them.

The confusion of the public has its counterpart in the minds of many faculty members in the rest of the university. Their colleagues in the education school perplex those in the institution's other colleges and they tend to view the education faculty from the perspective of one perched high on a ladder eyeing the laggards on the lower rungs. Faculty members throughout the rest of the university, after all, know their subjects well and teach them without special pedagogical preparation of any sort. What's the big deal? You get up and talk about what you know and those who listen either get it or they don't. Right?

What, then, is distinctive about the contributions of a school of education? Good schools of education provide substantive expertise for education practitioners, policy makers, and researchers. A focus on complex issues in context, produces expertise otherwise unavailable. Multiple disciplines are brought to bear. No matter the issue--school finance, the lives and potential careers of students, intellectual and moral development of youngsters, professional development for teachers, assessment, educational equity, worthy goals for instruction, the uses of technology--that issue is linked to others. Insights from many perspectives are needed to address any one of these issues properly. Thus, the work of bringing diverse disciplines to bear on the key issues and problems of educational practice is a central challenge confronting the education school, which must help students weave together the strands of knowledge they glean from various sources. Four areas of educational knowledge frame the distinctive contributions of the professional school. Some are more developed than others, as education schools move forward unevenly in developing these areas of expertise. But these areas of growing knowledge and expertise, more than any others, provide the *raison d'être* for the education school:

- Special Knowledge About Children and Their Learning
- Special Knowledge About Knowledge Needed by the Next Generation
- Special Knowledge About Education Systems
- Special Knowledge About Culture and Young People's Learning

Special Knowledge About Children and Their Learning

America takes its children for granted. Sometimes it seems that little progress has been made since the time when children were regarded as nothing more than small versions of adults.

This country did not even adopt compulsory schooling laws until it was clear that such statutes were needed as a device for ending the exploitation of children in mills and factories. It was not that reformers desired to promote schooling, but that they wanted a place to send children to keep them away from the oppression of the workplace. Today, the United States appears almost in a state of reversal after decades of improved regard for children. Many youngsters are without adequate health care in one of the wealthiest countries on earth. So horrendous has lawlessness become in parts of the country's inner cities that five-year-olds think that diving under the furniture at the sound of gunshots is a normal rite of childhood.

But America knows better even if it does not act on its knowledge. The healthy development of children is at stake every step of the way in their growing years. Children are complex organisms whose distinctive stage of life must be studied and understood in order to provide properly for their changing needs, especially in connection with formal learning. People can appreciate the work of naturalists who earn a living studying and reporting about the development of insects or birds. Great fascination surrounds advances of knowledge about chimpanzees who learn human language or about the intricate social system of ants. Well, the special study of children is no less valuable, particularly when its observations and findings lead to the design, implementation, and evaluation of interventions that enhance learning and development for each next generation.

Studies demonstrate, for example, the need for pedagogy to link a child's previous experience to the subject matter at hand. Furthermore, researchers have found that even very young children engage in complex thinking and problem-solving, a realization that underscores the need to customize learning tasks to suit the learner's experiences. Learner-centered education of this type requires an understanding of and respect for children and their ways of knowing, however informal, that they bring with them to school. For this reason, educators talk less today about whether the child is ready for school and more about whether the school is ready for the child. The school can't be ready if educators lack these valuable insights.

Schools jeopardize the education of children when educators disregard the powerful effects of out-of-school influences. The impact on each child of, say, interaction with adults, television, and peers affects learning and, in turn, should be considered in determining teaching approaches. More graphically, the out-of-school experiences of too many children, particularly those in depressed inner-city and other poverty-ridden areas, often teach them of the meaninglessness and futility of schooling. Clearly, teaching approaches, content selection, and content organization ought to consider these stark influences.

A rich body of literature provides insights for educators who are conversant with the findings. The needs, interests, and capabilities of the young have long interested those faculty members in schools of education who have led efforts to move the field from simplistic views to deeper understanding of the thought processes of children. The psychological, historical, sociological, and comparative perspectives brought to the study of children's cognition forms a basis for entirely new teaching applications. On-going studies in these areas hold important implications for teaching and learning, although substantial numbers of practicing educators remain unaware of the findings. Similarly, studies of motivation and of the propensity of individual children to learn in different ways hold promise of revitalizing the life of our classrooms and schools.

In the first of Oregon State University's Professional Development School sites, considerable student improvements in mathematics have already been demonstrated. In addition, classroom teachers, intern teachers, and students have initiated action research projects.

Researchers in education schools have shed light, for instance, on how youngsters can appear to be learning when, in fact, they're not. This distinction between "faking it" and "knowing it," the issue of what constitutes understanding on the part of learners, has emerged as a crucial issue in teaching and learning. Prior to gaining this insight, educators thought students in elementary schools were learning better than they actually were. When students reached junior and senior high school and the sheer volume of "memorized stuff" overwhelmed their ability to pretend, it became all too apparent that they didn't know or understand the material in the first place. As a result, educators familiar with this research are revising their views about what it means for students to know subject matter. Parroting the right answers was never enough, but many teachers didn't recognize it. Now the importance of students' *understanding* and making *meaning* in their own terms is clear.

Findings gained from research inform the work of many educators on a number of such issues. For example:

- Research shows that young people's competence is better served by learning a few things deeply and well, than by learning a wide variety of things superficially.
- Students can greatly improve their effectiveness by learning to manage their own learning, thinking, and problem solving, and

research has shown how teachers can help them to do so.

- Further work reveals not only how schooling can erode the learning potential of some groups of children, but how it can be reshaped to enhance their learning as well.
- Young people cannot use the knowledge they memorize in manageable packets of information. Knowledge takes hold better when it evolves over long periods of time into coherent structures. Teaching, then, must be refocused on fostering deep understanding rather than just the memorization of facts and mechanical procedures.
- We often assume that most students have similar conceptions of a given subject matter domain. In contrast, research shows that students have startlingly different conceptions of the same domain.
- Young people don't become good problem solvers because of innate ability or by learning general techniques they apply to all types of problems. Instead, they learn distinct problem-solving strategies for different knowledge domains (e.g., engineering vs. economics), and these strategies can be effectively taught to students.

This kind of contribution--providing educators with knowledge about how children learn, how their individual development is influenced by the different experiences of culture, race and class, and how they understand and retain important ideas--must be central to the mission of Tomorrow's Schools of Education. Educators' knowledge of important content has to be wed to both understanding and to skill in applying the pedagogy most appropriate for helping youngsters acquire knowledge. If a teacher knows something, but lacks an understanding of how best to teach it, then neither effective teaching nor effective learning is apt to occur.

Special Knowledge About The Knowledge Needs of Each Next Generation

Questions about what should be taught in school provoke contentious debates, within and outside the Academy. Just look at the furor over outcomes-based education, culturally-responsive pedagogy, and the new national history standards. Education schools must clarify these complex issues, often illuminating the deep conflicts in values that undergird them, offering guidance on how the dilemmas might be managed, or suggesting ways of setting priorities under conditions of uncertainty. The criteria for deciding what is most important for young students to learn are not straightforward. While education scholars have addressed these questions for many decades, it is fair to say that this area of expertise has received less

sustained study and investment than issues associated with how children learn. Nonetheless, curriculum theorists have long contributed sound criticism and analyses of what young students have opportunity to learn in school, and how it may or may not serve individuals and the society.

Other education faculty have drawn on future projections to analyze likely learning needs for the next generation. The need for greater multicultural learning, for example, has long been recognized in light of an increasingly global society. The growing interface between man and machines, combined with the seemingly unending information explosion, provokes questions about how youngsters can best be helped to make sense out of all the "stuff" that is traveling across the information highways. And as knowledge grows, while time to study and learn remains constant, the issues and questions about what constitutes needed and important learning for children become ever more critical. This area now calls for further investment and new approaches to the work of curriculum theorists.

Members of the education school faculty must prepare future and practicing educators to participate in the many debates over content and to inform the various points of view, all the while balancing respect for what the individual child needs to know with what children in general need to know. Above all, this means providing students in elementary and secondary schools with an education that prepares them for participation in a democracy, gives them the ability to reason and solve problems, and, eventually, leads to a productive and rewarding life. No inherent genes predispose children to grow into good citizens or able workers. Democracy's health depends on people accumulating participatory skills and appreciating the need sometimes to subordinate one's will for the good of the social contract. Success on the job demands taking possession of a body of knowledge, mastering skills, and acquiring good work habits and a cooperative attitude. Formal schooling helps shape students for these outcomes.

We do not pretend that school alone implants the knowledge and values that determine the kinds of adults that students will become. The neighborhood, the peer group, the media, the religious institution, and, particularly, the home stamp their marks on the child. But the role of the school looms ever more important in an era when the influence of other sectors is either diminished or out of proportion. The home and the church, for example, exert waning influence on some children, while peers and the media have grown ever more powerful. The school has the awesome responsibility of offsetting negative out-of-school factors while bolstering potentially positive ones that have lost their potency.

Knowledge about the knowledge needed by the next generation helps professional educators decide, each step of the way, what children should know. While steeped in only one or maybe two disciplinary areas, teachers must have sufficient grasp of other fields to draw on them and to interact with other teachers about them, ensuring that education in elementary and secondary schools is coherent and integrated. In addition, those who work in the schools must be ready at times to infuse the curriculum with viewpoints that take cognizance of a variety of intellectual, social, and artistic traditions and accomplishments. Few other workers in any field face so daunting a task as teachers do.

The responsibility rests with educators to resist pleas to insert inert esoterica into the curriculum. Educators must also reconcile divergent viewpoints of advocates, such as those who would either keep all knowledge separated into pristine disciplinary boundaries or those who would dispense with study of the disciplines as totally artificial conceptions. At the same time public school educators must deal with those advocates who want only more and more time to cover their particular subjects and passions. A school professional, in other words, must be equipped for the difficult task of sorting out competing claims on the curriculum. Students need more depth, not more coverage that skims across material that students forget almost as soon as they have encountered it. Furthermore, students need more experiences in school that integrate the disciplines so that they learn about knowledge instead of merely about subjects.

Special Knowledge About Education Systems

If, as we said earlier, change in schools should be approached systematically then surely school professionals must come to understand the workings of the system. Historically, the importance of such studies may have been held in low regard because those enrolled in the education school assumed that merely spending time in a public school provided all the knowledge they needed to understand the whole. But whence was this understanding to come? Most people in school systems have assumed ownership over only a small part of the system and worked in relative isolation from other parts. The modest goals of the schools of yesteryear permitted relative "success" under these arrangements. Not all students were expected to learn, and it was all right for many to do poorly and drop out. The elders decided what should be learned.

Teaching was showing and telling groups of students what needed to be learned, learning was listening and memorizing by oneself,

testing was sampling what students remembered on standardized instruments, evaluating was comparing and distributing students along a normal curve. Teachers needed only to manage their individual classrooms; principals would manage the schools and superintendents would manage the district. And central office staff would each manage a function of the district--the evaluation office or the staff development office or the business office, for instance. Individual educators were prepared each to carry out his or her part in keeping the "schooling machine" operating smoothly.

In contrast, today's education professionals have new goals and rapidly changing work requirements. Parents and community members are directly involved in helping to shape the nature of the school. All students are expected to learn, and at increasingly higher levels of accomplishment. If anything, schools suffer a deluge of information and educators have to decide how they will invest their time and talents. No longer will educators simply be judged by how smoothly the enterprise operates, but by the extent to which they effect ambitious learning for the entire student body. Today's educators succeed only when the students for whom they share responsibility learn effectively throughout the length of their schooling. The students and their learning are now the centerpiece.

Professional educators must now understand the system as a whole, knowing the contributions of the interdependent parts, so as to draw on those parts in the service of students' learning. They must now involve themselves in seeing that all parts serve the interests of all students, assuring their regular progress toward high learning standards. This means, for example, that second grade teachers now care about and accept certain responsibility for what happens to their students in the first and third grades as well. For what if second graders could learn more if they had a richer experience in prior years, or what if second graders who do well and learn to like mathematics suddenly develop a lasting distaste for it in subsequent years?

Teachers College, Columbia University, promotes the concept that the teaching/learning process is usually more effective, at all levels, as a collaborative rather than an isolated activity. TC accepts its responsibility to build trust and communication among school and university faculty--and from that foundation it generates innovation, creativity, and constructive change.

Working in schools today ought to mean knowing and sharing responsibility for what happens to youngsters in their prior or subsequent years and knowing and sharing responsibility for what happens in other subjects. The workings of the system itself must be understood. This means knowing how educational policies and practices throughout the system impinge on youngsters' learning--everything from evaluation policies and practices to financial decisions, professional development opportunities, responses to federal and state mandates, and so on.

America's education system comprises many actors and many complex parts distributed across local, state, regional, and national jurisdictions. Inquiry into educational systems may extend over a horizon so vast that the points along it cannot be discerned without turning one's head far in one direction and then far in the other. The particulars of the system are almost inexhaustible: governance, policies on instructional grouping, selection of textbooks and multimedia, writing across the curriculum, multicultural education, uses of technology, policies for desegregating schools, counseling, finance, professional development, and many others.

Learning of this kind requires study and experience beyond any single school or classroom. A practical examination of the education system would resemble nothing so much as a perusal of the proverbial elephant by the three blind men. One, holding the trunk, reaches certain conclusions about the animal. Another, stroking one of the great flapping ears, comes to a different verdict. And the third, leaning against the elephant's side in a futile effort to push him, forms yet another opinion about the nature of the beast. Each person in a school or school system tends to view the entire enterprise through the lens closest to him or her. Advanced students in schools of education may work as teachers, principals, and district administrators. They may coordinate transportation services, buy materials for the library, supervise paraprofessionals, specialize in the teaching of mathematics, or balance accounts in the business office. Each such position contributes to the larger education system of which it is a part. But few individuals ordinarily gain a comprehensive view of the system itself. Some observers say that this is why educational reform has not enjoyed greater success.

How may an individual school professional gain a full perspective of so vast an enterprise? As difficult as it may be to bring into focus, the larger picture, once fully and clearly viewed, provides a multitude of entry points for observing interconnections between and among the parts of the system. Altering what one does as an actor in the system has consequences for colleagues and for the roles they

play. Thus, as professional roles and responsibilities change to increase youngsters' learning in one part of the system, it is important that others change in compatible ways. Successful reform depends on those who understand the interdependence of these parts and how they must change in mutually beneficial ways for greater student learning.

A crucial new element, technology, also makes it both easier and more difficult to gain a grasp of the entire system. In just the last decade or so, education has grown more intricate with the introduction of the computer, not to mention the CD-ROM and other items of technology. Students in the same classroom can engage in a multitude of lessons as they sit shoulder to shoulder, each gazing at the monitor of his or her own computer. Teachers fashion new kinds of assessments using technology to allow for simulations and for computer-aided design. How can all of this be coordinated and exploited to the benefit of students by educators whose career-long orientation and support system has been built around paper-and-pencil? Those are some of the complications that technology has added to the system. But, fortunately, technology has the potential to facilitate and simplify work, as well. Classroom management and the operations of the entire school and even the school system can be more readily coordinated if connected appropriately to advanced learning about technology's role. Banks, hospitals, and courts all have altered and streamlined themselves by incorporating computers into the core of their existence. Education lags, but eventually similar changes will occur and when that happens the system itself may be more comprehensible.

Once, in what observers now acknowledge were simpler times, change was ordered by fiat, from the top down. This approach was thought to be dictated by common sense. Now, more is known about the change process because research has lifted the curtain that obscured the hidden obstacles to change. One of the most important disclosures has to do with the need for systemic change from the bottom up. Simultaneously, greater comprehension of the complexities of the education system and of the need to interact with families, social service agencies, communities, and other entities now places reformers on the cusp of what could be a glorious and productive era in American education. Much will depend on the education school's ability to seize the moment so that it can marshal this knowledge of the system on behalf of desperately needed reforms.

Special Knowledge About Culture and Young People's Learning

Teaching and learning, like all human activities, are usually culturally specific. Perhaps the most obvious and overdrawn example of cultural specificity is language, the most fundamental of all teaching and learning tools. Language conveys most content and important ideas made available in schools, and teachers are responsible for seeing that the language is in forms that have equally powerful meaning to the diverse array of students they must help to learn. If the metaphors, examples, and illustrations used for instruction are unknown, unfamiliar, or basically irrelevant to students, they lose meaning.

America's students come from multiple cultures and from homes where the first language of the parents and often of the children, too, is a language other than English. But cultural uniqueness is not limited to language, though it develops, like language, from the time youngsters are born. Children learn continuously at home, in their neighborhoods, at school, and wherever they happen to be. They acquire funds of knowledge, often culturally specific, from these varied experiences and it is this knowledge that they bring to school and use in response to demands made upon them. We know that culture, like language, makes a deep imprint on the mind and helps to shape thoughts, values, and behaviors. It becomes a filter through which the world is seen and interpreted, and it is powerful and enduring.

Children and youth are shaped by their culture and cannot be expected to disconnect from it when they come to school. Their culture is neither right nor wrong; it simply is what it is--and the school must help youngsters learn and develop with and through the cultural meanings that are uniquely theirs. Teachers and other educators should have the knowledge and skill to foster this enabling process. This makes the relationship between teachers and students a critical aspect of the teaching-learning process.

**The University of New Hampshire, Old Dominion,
Norfolk State, Hampton, and Howard Universities
collaborate through a Holmes mini-grant on a
multicultural education project involving teacher
education students and faculty. The group
engages in seminars, panel discussions, and shared
experience to consider needed program revisions
for today's educators.**

Research has revealed that students learn best by building on and revising what they already know. What they already know and what they are willing to learn, they acquire from the contexts in which they live. To foster their students' learning, then, and to provide instruction and instructional environments in which their students can thrive, those preparing to teach must gain a deep and extensive knowledge of the contexts of their students' lives.

Education scholars now recognize, though, that future educators cannot become experts in the cultures and languages of all the diverse students they may eventually serve. Nonetheless, prospective educators must learn to value each student's background and perspective--for in it reside the keys that can unlock the mysteries of successful teaching. Teaching is successful to the extent that students find meaning, and if teachers fail to connect youngsters' current meanings with the new ones they seek to engender, the students will simply not learn effectively.

One of the great challenges in good teaching is that of helping learners whose cultural backgrounds differ substantially from the teacher's own. Educators in this country, the most pluralistic on earth, must develop a repertoire of skills that enable them to understand how diverse youngsters think about various subjects, and how they, as teachers, can present knowledge in a variety of ways for their students. The good education school not only provides prospective and practicing educators with opportunities to work with diverse youngsters, but also gives them practice and assistance in representing disciplinary knowledge in a variety of ways that can reach the variety of youngsters that comprise America. Educators can no longer see or relate the world to the next generation through a singular set of lenses. They must respect and reach all sorts of youngsters--boys and girls, rich and poor, those of different races, ethnic backgrounds, and disabling conditions.

Participating in Policy Development

The schism between practice and policy making in education must be bridged and we think that the TSE is uniquely situated to develop capacity for spanning the divide. TSE faculty members and their partners in the Professional Development Schools are increasingly able to address the compatibilities and incompatibilities of educational practice and policy. Recently, for example, discrepancies were noted between testing programs for students and those for teachers. Higher level learning was asked of high school sophomores on their state assessments than was asked of the future teachers on their state tests. As school and university faculty observe factors like these, factors that obviously influence educators' and youngsters' learning, they must bring them to the attention of policy makers. But they ought not wait only until the problems present themselves. TSE faculty and their PDS colleagues are increasingly able to anticipate policy interventions needed to improve teaching and learning. These insights could be valuable in any consideration of policies affecting elementary and secondary education.

We said at the outset of this report that the TSE should embrace three complementary agendas--knowledge development, professional development, and policy development. Now, we will pursue that idea in greater depth in regard to policy development, pointing out how in its mediating role the TSE could help address policy issues, all the while advocating for young learners and indicating what might be best for them.

In examining how the TSE might involve itself in informing policy, we will concentrate on three areas by way of example, though the possibilities are endless. The three that we have in mind involve policies for standards for teaching, learning, and schooling; policies for equity and access in education; and policies for school-based coordination of services to children and youth. Policy development, for whichever of these purposes, must link itself to educational improvement. This guiding principle should properly underlay virtually all considerations of policy relating to elementary and secondary schools as well as to education schools. Better schools give students a foundation for fuller, more productive lives.

In essence, therefore, policy analysis and policy influence by the TSE go hand in hand with democracy-building, which depends on people attaining a certain level of education. The schools, in their purest and ideal form, prepare young people to take their rightful place in the American democracy, as old-fashioned as this may sound. To the extent that the schools fall short, democracy is imperiled. If the TSE sees its role in policy development as helping elementary and secondary education to fulfill this mission then surely the policies emanating from the TSE will be good ones.

Policies on Standards and the TSE

The recently-enacted goals legislation calls for incentive funding for developing voluntary adoption of national standards at the state and local levels. As the TSEs create networks of PDSs, they become a major resource for studying issues that must be resolved to develop workable standards. What would prod and encourage the schools to respond favorably to the standards? Do public schools harbor the capacity to implement the standards? Must teaching and learning change in any appreciable way to realize the spirit of the standards? Teachers and other school educators will likely require additional learning to achieve and adapt new standards for their own work and to see that students achieve the new standards. Many talented educators will be needed to help reach these new levels of learning, and the universities will be among the institutions needing to respond. The growing numbers of teachers certified by the National Board for Professional Teaching Standards can help.

The potential role for the TSE assumes even greater importance now that most states have embraced the national goal that "by the year 2000, the nation's teaching force will have access to programs for the continued improvement of their professional skills and the opportunity to acquire the knowledge and skills needed to instruct and prepare all American students for the next century". We suspect that the TSE will carve a special niche for itself on issues involving professional development, which must be revised to ensure the success of new policies affecting the teaching and learning of students. The learning of educators has emerged as a critical policy issue because the intent of the reform movement cannot be realized without substantial investment in professional learning. Higher levels of student learning and increased performance among young learners will not automatically result because people call for it. New knowledge and new approaches to educators' work are needed, and, in turn, professional development as we know it must change substantially.

Currently, professional development ties itself too thoroughly to credentialism and pay scales. The course-taking and the ensuing credential-granting that is now the norm often have little impact on actual practice. States and districts, in cooperation with organized educators, are exploring alternatives to the system and TSEs are lending expertise to framing new and better policies on professional development. Newer approaches use investments in professional development to educator learning that is tied to school improvement or to demonstrated achievement of high performance standards (e.g., such as with the National Board for Professional Teaching Standards). Most states and school districts have yet to alter their policies, which, ultimately, must support learning at the job site that promotes collegiality and leadership. The extent to which educators' professional development continues to rely heavily on the universities' current masters degrees remains to be seen, but districts will probably soon want more for their investment than a record of seat time in university courses.

Many Holmes institutions have assisted the National Board for Professional Teaching Standards. Faculty members from Stanford University and Michigan State University contributed to the basic conceptual underpinnings for the Board's work.

The TSE should align its interests in standards for educators with the activities of the National Board, which has begun administering assessments to identify worthy veteran teachers. At the same time, the TSE must formulate policy standards for beginning teachers in line with the work being done by the Council of Chief State School Officers. So far few states or districts have embarked on the road leading to comprehensive reform of professional development. This is a garden waiting to be sowed. Whether the weeds of old reappear or new flowers blossom will depend on the quality of the policies that cultivate professional development in the future.

Policies on Equity and Access and the TSE

As an agency promoting opportunity, the public schools must serve the least as well as the most privileged. Struggles around equity and access, however, have produced a mixed record. The nation has witnessed desegregation and resegregation. Courts have overturned finance systems and new finance systems have arisen to bring hardly any relief to hard-pressed school districts. All-black faculties have been dismantled along with the all-black school systems that they

served only to see the black representation in the country's teaching force dwindle to alarmingly low levels. Title I and then Chapter I have contributed to an apparent increase in basic skills among the most economically disadvantaged students, but the programs infringed on the quality of their classmates' and their own education by pulling children out of classes. Similar paradoxes confound programs for bilingual education and special education.

The promise remains, frayed but enduring, of public education as society's great equalizer, a potential source of opportunity and unity for a diverse and divided nation. More than ever, though, the public schools require sagacious guidance to stay the course. At this crucial juncture, the quality of policy making as regards equity and access will determine whether the United States moves into the 21st century offering a sense of hope or a sense of despair to many of its people. Among the issues on which the TSE should focus its expertise are those having to do with race relations, cultural diversity, inclusive education for students with disabilities, improved ways of providing bilingual education, sensitivity to gender inequities, and implementation of new guidelines for Chapter I.

What makes the TSE so qualified to contribute to forming these policies is the fact that the TSE itself and the PDSs that it helps create are fundamentally committed to supporting education that promotes rights, equity, and access. Throughout this report, we repeatedly pronounce our belief that such commitments must underpin all aspects of the TSE and its activities. If the PDS operates as we propose, it will be one of the leading proving grounds for the testing of policy. In essence, the PDS spans the gulf between theory and practice, permitting the TSE to formulate policy with full awareness of practical realities. Results, both empirical and scientific, can inform all aspects of TSE policy analysis in regard to equity and access.

As the debate over tracking grows, for instance, policy makers will need hard evidence to speak authoritatively on the topic. The PDS, founded on the premise of equity and access, will be a de-tracked institution that can provide living examples of what happens when a school adopts and adapts well-established research findings and extends respect to all children for their ability to learn. No guess work here. Look at the record. Examine what outcomes in the PDS say about schools that change approaches to tracking. We foresee the TSE, in alliance with its PDS, poised to offer many such policy insights.

Policies on Coordination of Services and the TSE

In much the same way, the activities of the PDS in coordinating social and health services for its students will build a record that can

be scrutinized for policy implications. We don't pretend that the PDS will be the only such site, but we do know that, unlike most other schools that coordinate services, the PDS will keep extensive data and that the findings of able researchers will be available to shed light on the impact of coordinated services.

Policy issues abound here. The configurations of the various school models for coordinating services lead to questions about educators' preparation for such activities. If a teacher or principal, for instance, is expected to blow the whistle on child abuse in the home then careful and thoughtful training for that specific purpose must be provided. And just how much of that kind of work can be imposed on the teacher or principal without compromising the main goals of the curriculum?

We project that the TSE and its affiliated PDSs will develop service delivery models in conjunction with new policy approaches that create new structures, programs, and funding opportunities. We expect the schools of the future to feature coordinated services that operate year-round and that require professional educators to take on tasks that they do not now perform. Perhaps in an ideal world the public schools would be able to restrict themselves to academic concerns, but in the real world all sorts of messy matters such as poor nutrition, uncorrected vision problems, family mobility, and parental unemployment impinge upon a child's education. Educational interventions on a child's behalf may be all but impossible without extending the long arm of concern into the home through the conduit of the school. Even after acknowledging this necessity, however, the schools must take the next step and figure out how to deliver the needed services effectively so that the services enhance teaching and learning. The TSE can be a beacon to those searching for ways to strengthen such efforts.

A Commitment to Diversity

What must be done above all else to improve the learning of the children most ill-served by America's schools? How may professional study within the TSE better prepare educators to respond to the needs of such students? How might changes in research and policy alter our capability for response to their learning needs? These questions pose matters of pressing urgency for schools of education.

Knowledge about effective practice for a diverse range of children is starting to emerge and can be accumulated to an even greater degree by TSEs, for they will not shun these most salient issues. Studies of teachers who are successful with all students point to familiar themes. They hold high expectations for these students and provide them with academically-demanding work. Furthermore, students benefit from role models and from teachers who show a sense of caring. Teachers must help connect school and home, and the TSE must educate school professionals to forge the needed links.

Two critical principles present themselves: First, the languages and cultures of learners should be incorporated into the school milieu. Second, the codes and customs of the school should be explicitly taught so that all children can participate in the mainstream. But without the knowledge and skill that the TSE can impart to both novice and experienced educators on how to implement these principles, chances are that the principles will be honored in the breach. Educators, even gifted ones, aren't born with the ability to teach what they don't know. Furthermore, those who work in schools often need assistance in their efforts to link the classroom and the home. A growing body of literature pertains to the home-school connection and educators need the opportunity to engage in guided reflection on this topic.

Educators increasingly recognize that effective practice in public schools involves schoolwide arrangements with a host of service providers, as well as direct engagement with families, especially those that historically have felt excluded by the public schools. Research attests to the fact that parents from all social classes are more interested in their children's schooling than many educators and policymakers believe. Schools have to do more to engage parents as allies in the education of their children. This prospect threatens some school professionals, who perhaps grow anxious about their lack of knowledge about how to foster relationships with the home.

Serving a diverse group of students more effectively requires knowing more about the out-of-school lives of these children. For the TSE, the mission is clear: those who work in the schools cannot do the best job possible for students whose lives outside the classroom are a mystery to them. The TSE has to become a repository of wisdom and a center of research about the diverse cultures of the United States and, in particular, about the interventions in teaching and learning that will enrich the school experiences of all children.

Self-knowledge is a foundation stone of this quest, ironically, for both student and educator. A TSE should strive to ensure that adults who work in schools begin their professional quest by taking a personal inventory as a prelude to trying to help their students get to know themselves. Self-knowledge extends to searching one's own beliefs and attitudes, not unlike the training of a good psychoanalyst who cannot minister properly to others without becoming better acquainted with oneself. Coming to terms with one's feelings and confronting one's prejudices prepares a teacher to help students gain comfort and assurance in their own cultural identity inside and outside the school. Many students otherwise end up with feelings of alienation and irrelevance.

Professional studies should contribute research-based findings on learning differences that stem from cultural backgrounds. Education professionals can be taught procedures for gathering information about children, families, and communities and for assessing their teaching in light of children's preferred learning and the interaction of the school with styles in the home and in the community. The implications for developing a multitude of teaching strategies are implicit, though an educator must always remember that, cultural backgrounds aside, students are individuals whose separate needs cannot be dictated solely on the basis of cultural origins. In other words, a skilled teacher uses this knowledge not to shove students into cultural pigeon holes but, like a good tailor, to sew for each youngster a garment that fits his or her unique contours.

The classroom of the TSE offers one important setting for equipping members of the education profession for these tasks. As part of their education, professional educators should spend time in schools with diverse populations, observing and learning from successful teachers. But the classroom cannot be the sole venue for this kind of learning. Students from the TSE should shadow principals and work with various service providers in such schools as well. Finally, the TSE should also help the student fashion field experiences in neighborhoods and even in homes where they can get to know more intimately people who are unfamiliar to them. Ultimately, to know a child or anyone else, is to become familiar with the texture of the soil from which that person sprung.

For a variety of reasons, few TSEs are as well prepared to take on this responsibility as they might be. Their faculties, for instance, are overwhelmingly white and monolingual, people who for the most part have had little experience teaching those different from themselves. Fewer than 5 percent of education school faculty nationally have taught for even a year in inner-city classrooms. Likewise, many schools of education lack field settings that would enable their students to come in contact with diverse populations. Nor have the institutions aggressively recruited classroom teachers from those settings to act as clinical or adjunct professors. As for the students entering studies in the field of education, they generally share the demographic characteristics of the faculty and often express a preference to work in schools that are middle-class and suburban. Those who venture into inner-city classrooms, unequipped as they are to cope with an unfamiliar setting, frequently conclude that they lack the ability to teach, administer, and counsel in such settings.

Schools of education must launch vigorous recruitment campaigns to enlist more minority teachers. Efforts like Recruiting New Teachers, an organization that runs an advertising and information campaign to induce more members of minority groups to enter teacher preparation programs must be intensified. The TSE should align itself with such programs and strive toward the ideal of an inclusive community in its own programs and in the composition of its faculty and its enrollment. The children in America's elementary and secondary schools deserve no less.

An equity council has been established at the University of Mississippi for recruiting minority students and faculty as well as for connecting with historically-black institutions for faculty exchanges and student support.

Teachers of all backgrounds must understand and be better prepared to act on the growing knowledge of human cognition which enables them to accommodate the needs of diverse learners and be more effective in their teaching. Youngsters understand a lesson in their own way, but may not be able to articulate what they know in a manner comprehensible to their teacher. So teachers must be able to project themselves inside each learner to see how the student conceptualizes the material. This is not simply the empathy of caring, as important as that might be. What we have in mind is a teacher's working knowledge of cultural-based learning. Such expertise enables teachers to reach youngsters and communicate with them through metaphors and experiences that have meaning in their terms as well as in teachers' terms alone.

More than this, though, equity demands that faculties of elementary and secondary schools and of education schools, too, wear the face of America. To settle for less is to deny the potential of a significant portion of the population. This is a country, statistics tell us, in which children from minority groups will constitute the majority of the enrollment in 23 of the 25 largest cities by the year 2000. By 2020, they will make up fully 46 percent of the nation's entire school-aged population. And the number of students from homes where a language other than English is spoken constantly grows. Poverty complicates the changes by engulfing one in five school-children in circumstances utterly unlike those with which most schools are equipped to deal.

These children need to see people with whom they can readily identify in positions that indicate that they can make something of themselves, that they, too, can aspire to teach. They need people who readily understand them and their plight. They need role models. We would not be so foolish as to say that white, monolingual teachers cannot play this role or that all teachers of color are automatically expert at such matters. Of course, white teachers can relate to minority students, and many have with great success. Some teachers, though, clearly harbor destructive biases and an even larger number have not the foggiest idea of how to cope with a classroom full of students whose backgrounds vary greatly from theirs. The possibilities of greater progress will in all likelihood be enhanced by building a more diverse group of professional educators. It will especially give poor minority students who need the most help something extra on which to grab hold as they try to scale what for them is a very slippery slope indeed. In the final analysis, then, it flies in the face of reality for schools and colleges to continue to have faculties and student bodies that are so disproportionately balanced.

What we urge will not be easy. Among the country's full-time faculty members at institutions of higher education in 1991, only 2.1 percent were Hispanic and 4.7 percent were African-Americans and nearly half of them were at historically-black colleges. The numbers for Native Americans and Asian Americans were lower still. Nonetheless, TSEs must try to carry out the education of educators in circumstances that respect equity and diversity. Schools of education should model the kinds of communities that they hope to see established in elementary and secondary schools and in the United States itself. Issues of racism, sexism, and other forms of prejudice must be faced squarely.

The Holmes Group set up two programs to help advance this priority. Its Equity Critique and Review Panel reviews the publications and other work of Holmes in order to provide feedback on the han-

ding of issues of equity and access. The Holmes Scholar Program sponsors one to four fellows on each campus, minority students who study at the advanced undergraduate or graduate level and who eventually will be candidates for faculty appointments. These four goals characterize the Holmes agenda:

- To create a more racially diverse community of faculty, staff, and students and to prepare additional persons of color who are excellently-trained to become professors on the tenure track at schools of education and on the clinical faculties of Professional Development Schools
- To create a more racially diverse membership in the Holmes Group so as to benefit from the participation and contributions of a more diverse group of faculty and students
- To increase the number and quality of graduate professional education programs that have substantial numbers of faculty and students from minority groups
- To structure on-going evaluation mechanisms by which the reform efforts of the Holmes Group and its member institutions may be assessed for their impact on progress toward equity and cultural/racial diversity

As part of the response to the Holmes agenda, Oklahoma State University's teacher education program has sponsored six Holmes Scholars since the inception of the program. These doctoral-level students have included four Native Americans, and one African-American, and one white woman pursuing a field in which few females are employed.

Future actions affecting the education of educators should flow from these goals. The TSE must establish, for example, specific initiatives to recruit and support the graduation of more minority students from the education school. The attendant strategies might include creating an advisory panel on the recruitment of minority students, forming tighter links with public school systems as sources of applicants, organizing trips to campus by students from high schools and community colleges, targeting professionals in other fields who might consider career changes, and involving alumni in these various efforts. An evaluation by the Equity Critique and Review Panel of progress to date in the Holmes Scholar Programs stated:

Although the Holmes Scholars believed that peer networking was the most significant experience in Holmes, their networking with each other cannot replace the needed association with and guidance of faculty and administrators. Graduate students of color need advocates, sponsors, and counselors who support and guide them through their programs. Admitting and providing financial aid to Holmes Scholars are mere beginnings; teaching, promoting, and socializing them into the professoriate are subsequent and more significant next steps in the process.

The Holmes Group has an uneven record when it comes to assessing progress towards these equity goals. Some institutions have documented their progress and some others have no data whatsoever. The Equity Panel has developed and tested an instrument for monitoring progress that Holmes members are now using. While the TSEs cannot alter the past, the future remains to be shaped. The inclusion of more diverse voices will necessarily produce conflict and challenge in the TSE and PDSs from time to time. But the contributions from our research and development activities, our professional development, and our policy work can only improve American education by giving greater attention to its rich diversity. The TSEs have it within their grasp to fashion a future that speaks to the American ideal of equality of opportunity for all.

Footnote: To increase the diversity of the candidate pool available for faculty positions in their own and other universities, the Holmes Group created a Holmes Scholars Network in 1991. Currently over 180 graduate students of color are pursuing advanced studies in member universities. As of this writing, 17 have graduated and hold positions in education; 13 are in tenure track positions in US universities.

Human Resources:

Making People Matter

What is true for students in elementary and secondary schools is equally true for students in the education school, namely, that the most effective learning results from having teachers who are competent and caring. Of all the resources that can be marshaled in the students' behalf, the overall talent and composition of the faculty matters most. Whether attending schools or colleges, students deserve the opportunity to learn from diverse and highly qualified teachers.

No educational institution at any level would readily admit that its faculty consists of teachers who are less than "highly qualified." Yet, the common parlance in higher education refers to "teaching institutions" and "research institutions" and we all know on which side of this divide the members of the Holmes Group tend to fall. The country's great research universities wear their appellation proudly, but, by extension, this research distinction implies that teaching occupies second rank. Of course, some institutions excel in both research and teaching and, to be fair, some members of the Holmes Group attain this status. Many of the large research universities, however, often turn over much of the responsibility for educating educators to volunteers, part timers, and graduate students, and to the least experienced members of the regular faculty.

Furthermore, students enrolled in the education school often must contend with a faculty so dispersed and so divided as to rob their education of all coherence. This faculty comprises arts and science professors offering studies in the general liberal arts and in the students' major and minor areas of concentration; other arts and science faculty teaching methods courses to education students; the regular faculty of the school of education; the scattered corps of cooperating teachers in the public schools; adjunct faculty who are mostly doctoral graduates working full-time in the education field and teaching part-time at the university; and finally, graduate students and staff who teach, advise, and supervise field placements.

New arrangements would better allow the school of education to provide the best possible instruction for professional education students. The TSE must become a different kind of institution, where the teaching responsibility gets the attention it merits. To move in this direction, the TSE will have to find new ways to carry out its mission and it must do so in concert with arts and science colleagues who help to heighten the importance of teaching campus-wide.

The Students

As one of the most important changes, we recommend that the TSE organize its students into what we call "cohorts," the members of each cohort journeying together along a common path of professional learning and socialization that leads to lifelong personal and professional growth and development. No longer should any student in a school of education lack the support of a group of students who form their own small learning community. Each student would be part of a group in which fellow students take an interest in each other's attainments. We expect that the members of a cohort will form a mutually supporting network that endures for many of them throughout their professional careers.

A cohort, for the most part, would include students pursuing the same program. The TSE would have to find the right size for a cohort over time, seeing if perhaps a dozen or 20 students might be the most practical number. Their class assignments might often call for students in the same cohort to function much as a group does in, say, cooperative learning, carrying out a project for credit together. Other times, the cohort could act as a study group, with students preparing together for examinations. Some education faculty still struggle with the concept of cohorts for part-time students, while others report improved retention and learning with cohorts of part-timers. Networking around how these new arrangements are variously developed and managed will be key to their eventual success as innovations for personalizing learning and building community. The TSE will serve the students through the cohort and individually by improvements in these five areas:

- *Recruitment*
- *Learning Experiences*
- *Assessment*
- *Placement*
- *Continuing Education*

Recruitment

Students will be admitted to the TSE, both at the initial and advanced levels, with the idea of fitting them into cohorts that will remain intact so that they encounter a set of learning experiences together. Individuals can, of course, go off to take electives in which other members of the cohorts may or may not enroll, but much of the study in education will be pursued as a group. Just as the TSE will seek diversity in its enrollment, the membership of the cohort, too, will be diverse, taking into consideration such factors as age, race, ethnicity, gender, and life experience.

The department of education administration at the University of Utah's Graduate School of Education has a field-based Ed.D. program for practicing administrators. It emphasizes the use of theory and research to frame problems of administrative practice and to seek, critically examine, and apply information to solve problems of practice in educational organizations. In an attempt to put into operation ideas on curricular integration, faculty members in Purdue University's teacher education program offer their respective methods courses to a cohort of preservice students in a block schedule.

Diversity within cohorts at the graduate level is especially important because of the specialist's need to achieve a broad understanding of youngsters. Members of the cohort can provide insights to each other so as to gain the ability to step back from a particular situation and see the larger picture. Otherwise, specialists view problems only from within the confines of their own limited perspectives. If this happens, a special educator may chalk up a child's failure only to the school's curriculum or pedagogy, or the counselor may see the cause of failure only in the child's family situation, or the school psychologist may see the problem only in test results, or the administrator may see the problem only in terms of school organization, or the teacher may see the student as not personally investing enough effort. Each professional, drawing on his or her specialization, forms a working hypothesis about the pupil's learning difficulties and conducts his or her analysis in isolation of the others, implying simple and single causes for the behavior of students. Educators should not be educated in ways that suggest that the solutions to students' problems are so elementary.

Recruitment and admissions procedures in the TSE will go beyond grade-point averages and standardized test scores to apply strong, but liberal entrance standards. The TSE wants students who possess a service ethic and who place a high priority on diversity. It wants students who value learning for themselves and enjoy helping others learn. Members of the cohort should be people who assist each other, just as one hopes that they will help their students and colleagues as professional educators. That quaint trait, altruism, persists through these selfish times and we hope to see it manifested in as many educators as possible. Financial assistance to students admitted to the TSE will be as available when possible so that need

does not prevent a qualified applicant from attending, thereby helping to create the kind of enrollment from which diverse cohorts can be assembled.

Learning Experiences

Specific faculty members will be assigned to various cohorts so that both groups, education students and faculty members, get to know each other through sustained contact over a period of several years. The TSE will underscore the importance of knowing and caring about students by building these close associations between faculty and students. The faculty members working with a particular cohort should be aware, of course, of the various activities in which students engage under the auspices of the TSE and nothing should isolate the student from the faculty, as practice teaching so often has done. Collectively, the faculty members will assume responsibility for seeing to it that quality learning experiences are afforded to all of their students. And they will strive to ensure that learning that takes place away from campus--in the PDS and at other field placements, for instance--also adheres to high standards.

What we describe here pertains to students at advanced levels, those pursuing graduate programs, as well as to undergraduates. The responsibility of the TSE to its students assumes an added dimension at the post-baccalaureate level. The TSE will demonstrate its concern for advanced students by more closely monitoring their teaching assistantships in the education school so as to banish exploitation. It makes sense for qualified graduate students to play a role in the instruction of undergraduates, but we object to the education school using them primarily as a source of cheap labor. Teaching assistantships should be educationally valuable for the graduate students, who, after all, attend the institution as students themselves.

Assessment

Reports to students in the TSE ought to keep them apprised of their academic progress, periodically assessing their competence. Portfolios and performance evaluations based on high professional standards will be part of the record on which assessments are based. Substantial information will be garnered by PDS faculty judgments of students' performance throughout their internships. Some students will turn out to need assistance to meet high standards and the TSE should provide it; other students may be aided by counseling them out of the program. Proper monitoring should prevent the possibility of a student not finding out until the end of the program that he or she has not measured up.

Hiring Networks

If the TSE believes in its programs and considers the students who complete them well qualified to work in elementary and secondary schools, as indeed they should be if they get credentials, then the TSE will take every step possible to get them into positions from which they can help America's children. It is that simple. The TSE must commit itself to its students and the obligation does not end with the awarding of a degree or a credential. Holding educational professionals to high standards does little good if they can't use their well-honed talents in the workforce. The TSE will maintain contacts with groups of school administrators and school boards to promote the interests of the students that it educates.

Continuing Education

The responsibility of the TSE for its graduates continues in another way. The TSE will provide opportunities for them to keep growing. Lifelong professional development will be every bit as much of a primary function of the TSE as initial credentialing. In coming years, school districts and individual schools will probably increase their involvement in the on-going development of their professional staff, but the TSE must act whether or not school districts accept this responsibility.

By tradition, most universities have provided their continuing education for teachers and other educators through added coursework, offerings they typically make available both on- and off-campus. These courses accumulate credits that count toward step-ups on the salary schedules of most school districts. Summer school programs for educators who wish to pursue continued studies in education have also been popular, as most districts don't yet have year-round schooling, and teachers can use their vacation time accordingly.

Another popular form of continuing education, supported in part by universities, has been that of individual professors going out to consult in the schools. Universities typically allow their professors one day a week for consulting, and the school districts select and usually pay individual faculty as speakers, workshop leaders, and advisors. Typically these "consultations" are limited to one or two day contributions and don't involve course credits, although they do frequently count toward the accumulation of CEUs (continuing education units) that have been mandated by state governments for educator's continuing certification.

The weaknesses of these continuing education offerings have been their overemphasis on seat-time in university courses, their lack of continuity or sustained assistance over time, and their lack of close

connection to educational practice as it affects youngsters' learning. Prior to the systemic suggestions made here for comprehensive professional development, universities wanting to contribute regularly to the continuing education of educators didn't know how to handle the problems of scale. The magnitude of the education workforce in each state's elementary and secondary schools dwarfs that of higher education, and since all educators need to be continuously educated to ensure that each new generation is better educated than the last, the challenge takes on an overwhelming dimension. The proportional differences in faculty size appear insurmountable.

But now we suggest the possibility of changing these circumstances in ways that address the long-standing problems of quantity and quality in the continuing education of educators. We recommend that universities develop a collaborating faculty of very high quality in Professional Development Schools, a faculty that would have a magnifier effect in terms of the qualified human resources available for continuing education. Instead of spreading the university's human resources thinly and sporadically across the schools in the state, the institutions would focus their resources on collaborating PDS faculty. A one-time, up-front major investment in these school-based educators would create a top-flight set of practitioners as full partners in their educational research, demonstration of best practice, preparation of novices, and in the continuing education of other educators in the state. The idea is to produce a synergy by combining heretofore separate, highly distributed, and scattered functions.

Here is how it might work: by focusing its resources, the university develops a set of PDS sites that serve, eventually, as the internship sites for prospective educators. Because of their extended and stronger preparation, interns approximate today's beginning teachers, yet they do not yet practice with full autonomy. They are still learning and being screened for their professional expertise, although, importantly, they provide an added human resource for the Professional Development School sites. The interns' presence, with some of the university faculty's presence, provides reallocated time for the school faculty. During this time, the school faculty--as both expert practitioners and collaborating faculty for the university--conduct and demonstrate quality lessons and make themselves available for teaching prospective and practicing educators via sophisticated human and technological networks.

Thus, the university extends its expertise and outreach through this set of continuously educated partners. These partners collaborate in education research and professional education at all levels. When technological up-dating is completed in PDSs, these outstanding practitioners can also reach their colleagues throughout the state via

a great range of interactive media. We foresee the time when the PDS networks might actually blanket the state through cooperative arrangements among universities and schools. This network could frame the professional development infrastructure in each state, giving virtually every educator access to research-based knowledge and skill in more flexible and responsive ways. But the human and technological networks needed to connect schools and universities must first be in place, and such changes require significant adaptations in many long-held traditions.

A new kind of professional development would emerge, one that would inevitably lead to reconfiguring faculty roles and graduate programs to increase relevance, quality, and accessibility. Relevance would increase because the focus of continuing education would now be placed on improved learning in the schools. Quality would rise because continuing education would be grounded in research and competent practice in actual schools. And accessibility would increase through greater numbers of university faculty--including the collaborating faculty that the university helps develop and bring into true partnership--and the technological infrastructure built through university and school investment in the PDSs.

The human resources and capacity gained by establishing this promising new institution and set of networks on the American landscape--the Professional Development Schools--affords a more flexible university contribution to continuing education. For example, the TSE with its PDS collaborating faculty would have real demonstration sites available, in which educators could actually see and experience the changing nature of education. And by grounding the substance of professional development in trustworthy study of educational practices that have real consequences for young people's learning, we stand a chance of diminishing the "every-new-fad" nature of contemporary continuing education in the schools. The TSE also can help graduates who want to prepare to sit for the examinations of the National Board for Professional Teaching Standards, and as the National Policy Board for Educational Administration brings forth standards and assessments, the TSE can also assist the administrators and aspiring administrators among its graduates. In speaking of what the TSE owes to its graduates we do not mean to indicate that non-graduates shall be excluded from the TSE programs. But if the continuing education programs of each education school concern themselves primarily with their graduates this will at least assure each professional of a place to turn for this kind of advancement.

As the TSE increases its capacity for outreach with PDS faculty over time, it is likely to play a more important role in professional development for neighboring schools and even for more distant schools

that can participate by way of computer hook-ups. We expect increased capacity for outreach as PDS faculty from the school and university together develop more familiar routines, as university interns become more regular parts of the PDS resource, and as all participants develop greater confidence and expertise in their new arrangements. The human and technological networking capacity that the PDS develops should eventually become an important resource for dissemination of research, tested theory, and wise practice throughout our professional development networks nationwide. Together, the various school districts and the TSE should be able to design more meaningful and more lasting professional development activities than either could offer if left on its own. Certainly this "can do" cadre of professional development specialists working in the PDSs will be more valuable than the traditional consultants who come from various government or private consulting firms, typically from out-of-state.

The Faculty

The TSE should take an expansive view in defining the faculty community involved in the education of school professionals. Some are farther from the center of the circle than others, but somewhere within the circumference reside many people whose professional activities touch upon students studying for work in the schools. Students in the TSE will gain to the extent that the institution nurtures the connections among members of the faculty. All of those whose work has any link whatsoever to the TSE should be encouraged to regard themselves as unselfish resources for the students of the education school. This means changing the mindset of some people.

Through its participation in Fordham University's National Center for Social Work and Education Collaboration and its Stay-in-School Projects, Fordham's Graduate School of Education is developing elements of collaborative professional education for social workers and educators. The efforts focus on an examination of inservice and preservice preparation of professionals for work in full-service schools.

Faculty members in the arts and sciences, for instance, play key roles in providing liberal education, depth in the disciplines, and sometimes in subject-specific teaching methods, but they pledge primary fealty to the liberal arts and especially to their disciplines. And within the TSE itself, some faculty members play similar roles in

such disciplines as educational sociology, history, or psychology. Other people who teach education students are mentors in the school and not even integrated into the campus community. The allegiance to the goals of the TSE of these men and women should be strengthened so that the majority of the faculty supports the general mission of the TSE. We acknowledge the difficulty the TSE will have in attaining this goal. Surveys show that faculty members in higher education regard their loyalties to their disciplines as superseding those to their institutions. But the TSE must cultivate the faculty so as to make them comfortable with their place within the orbit of the professional education of educators and to encourage their support of the TSE and its programs.

A troubling aspect of the faculty continuum just described has to do with the uneven balance in status, rewards, and integration into the professional community. At one end, university-based scholars enjoy the greatest advantages. At the other end, the more one's work ties that faculty member to the public schools, the more marginal the rewards and the status in the education school. Thus, few of those with university appointments want to accept assignments that bind them closer to the public schools. The situation resembles that which formerly existed in public education, when teachers who taught the youngest children occupied the positions lowest in pay and prestige and their colleagues in high school got the most recognition and the highest salaries. In the years ahead, the TSE must correct this imbalance and underscore the belief that professional proximity to elementary and secondary school students means being nearest to the fundamental mission of the school of education.

Some institutions have recruited and appointed young faculty members in order to further these objectives, but by working as extensively in the PDS as they do, these newcomers place themselves at a disadvantage. The university's reward system continues to favor a steady stream of publications over all other criteria for promotion, tenure, and merit pay. Likewise, the elevation of the clinical professorship remains problematic so long as such field-based positions get marginal backing from the university. Criteria for judging excellence in faculty contribution to the schools should be developed as soon as possible so that the university has tangible standards for evaluating the kind of faculty work that verges away from more traditional activities.

The University-Based Faculty

The TSE cannot fulfill its goals unless it welcomes a full range of scholarly approaches among its faculty members. Many kinds of faculty roles will prove vital to the university-based school of education of the future--the statistician developing new quantitative tools for

research syntheses; the historian exploring gender relations in schooling; the policy analyst consulting on reform of federal education policy; and the developmental psychologist studying the emergence of social competence in children. The TSE requires a broad, eclectic mix of scholars who bring cutting-edge knowledge to the programs of professional development. For that reason, nothing in this report should be read as hostile to this free play of scholarly inquiry or to the marshaling of many disciplinary perspectives on a wide range of issues, questions, and problems. These scholarly pursuits have brought distinction to the Holmes institutions in the past and will continue to do so in the future.

A fresh emphasis in the revamped school of education, though, will be put on forming a tighter bond between scholarship and practice. The creation of the PDS promotes that objective. Thus, the TSE agenda has implications for the composition of the university faculty and for faculty work commitments. Tomorrow's School of Education unabashedly seeks to employ more faculty members who want to use their research abilities to pursue interests in the settings provided by elementary and secondary schools, grounding their scholarship in practice.

Nine of the 12 professional development schools with which the University of Louisville is working are in urban areas. The first and most well-developed efforts are two urban high schools where the university teaches secondary education courses. Practitioners help with the planning and the teaching. University faculty in turn, are involved with teaching, restructuring, and research projects in the schools.

If one were to observe such scholars' workdays or work weeks they might look something like this: the professors divide their professional time mainly between two locales, the TSE and PDS, shuttling regularly between campus and public school. Sometimes they teach classes on campus, as professors have always done, and other times they provide professional development for practicing educators at the PDS itself through study groups and other means. Sometimes they co-teach children in the public school; other times they confer with school teams as part of their shared responsibility for TSE interns. They spend some of their time at the PDS testing hypotheses through action- and intervention-oriented research projects, carrying out this work alone at times and sometimes collaborating with school faculty members. When the findings are published, the authorship may reflect a sole investigator or the names of practition-

ers in the PDS and maybe even education students who are listed as co-authors in recognition of their scholarly contributions to the publication.

This new breed of professor must learn to walk the new walk, keeping one foot in the traditional scholarly community of the campus, where one must satisfy rigorous canons and norms, and keeping the other foot in the public school, where one respects the realities of practice and honors the need of educators to serve children, schools, and communities. Only a few brave and dexterous souls have mastered this unusual walk so far. Those who try to combine work in the public schools with assignments on campus often stumble because the university hobbles them by withholding the support they need to work with the public schools. As we said, even the university's standards for judging such practice-based research remain inchoate.

Given the right backing, however, an exciting array of bold scholarly ventures emerge as possibilities once connections between the TSE and the PDS are made on the levels we envision. These are just a few such examples:

- A psychometrician might work with PDS faculty to develop new methods of student assessment in the schools.
- An expert in special education might try out new approaches to inclusion of disabled students in the mainstream of the schools.
- An expert in literacy might develop, pilot, and study the effects on learning of integrated approaches to reading and writing.
- A professor of educational administration might develop and study the exercise of team-based leadership and shared decision making in the PDS.

These scenarios predicate themselves on the assumption that the PDS will be a resource for all faculty members at the university, not just for a few in the school of education. To realize the fullness of the vision, members of the arts and science faculty must be drawn into the work of the PDS. We realize we propound an ambitious agenda, one that demands changes in the faculty culture for all of this to happen. Long-standing discontinuities and contradictions that have plagued the professional education of educators can be remedied only if liberal arts and education professors work together, if the education school creates close relationships with a set of PDSs, and if professionals across fields collaborate around models of integrated service delivery to children and youth.

The Field-Based Faculty

We propose to integrate the field-based portion of the faculty fully

into the TSE faculty so that they no longer have the standing of second-class citizens. Prior to the rise of the university in America, apprenticeship sufficed as the principal form of professional education. The professional school, vested with pretensions of the larger university of which it became part, obviated the simple arrangements of the apprenticeship in the name of uplifting the profession. This shift can be counted as progress insofar as the professions developed a theoretical and scientific basis for practice that could be conveyed through a rigorous course of study. But, in education, some of the benefits of the older mode of learning on the job from a master disappeared and the vestiges of the master's role lost its prestige--largely because standards were not maintained for selecting the masters.

Thus, particular attention must now be given to the clinical professors whose work primarily is in the public schools. The clinical professors--we wish another, less medical title were used--must come from the ranks of distinguished practitioners with substantial experience in the schools. These faculty members form a living bridge between campus and practice and will share with colleagues on campus responsibilities associated with the Professional Development School agenda and with the development and operation of professional studies programs. Differentiated roles will be developed, where faculty having their tenure with the schools collaborate with faculty tenured with the university in making significant contributions to programs of teaching and inquiry. Clinical professors must be made to feel a part of the university even if their work commitments are away from the campus and focused substantially on the PDS and its youthful learners. Upon these educators fall a main part of the responsibility for ensuring that education students experience quality in practice, and are prepared to meet high standards.

The Holmes program at Louisiana State

University has been well served by the creation of clinical faculty roles for 11 new members of the faculty. Clinical faculty are primarily responsible for helping Holmes students integrate theory and practice through guiding and supervising their practicum experiences. A critical outgrowth of The Ohio State University's PDS initiative is the creation of a "clinical educator" role wherein expert veteran teachers are released for 50 percent of their time to interact directly in the initial teacher preparation program and to provide leadership for continuing professional development and school improvement at PDS sites.

The Holmes Group case studies conducted in conjunction with this report indicate that most universities are revisiting the issue of field faculty and making appointments with an eye toward diversifying and upgrading this role. Many of these appointees are seen as integral to the PDS. We must build on these efforts, insisting that reciprocity agreements be in place with the schools, and work out collaborative staffing arrangements. Members of the TSE faculty should treat those in the PDS as peers--not as glorified graduate assistants. To bestow upon the clinical professor some of the luster of the masters of old, the TSE must invest in planning and professional development for both school and university faculty as shared assignments are explored. As no single model exists for this renewal, we suggest that each university further its own exploration, and share with others the various approaches that best work with the public schools.

At the most modest level, a TSE might arrive at an arrangement under which PDS faculty guide novices engaged in field experiences by providing observation, individual and small group instruction, projects of short duration, and extended internships. A more far-reaching approach might involve creating formal positions with pay and dedicated time for designated PDS faculty who will teach at the university, as well as at their own public school.

Whether the TSE chooses either of these approaches or some other arrangement, the participating PDS faculty members should be selected with care and given good preparation for their additional duties so that they will be full colleagues of the university-based faculty, partners in a renewal of professional education based on integrating practice with theory. Field-based faculty members should be viewed as potential colleagues of university-based faculty in research and development activities, as professionals comfortable with serious intellectual work. Field-based faculty members should be expert and exemplary practitioners, very much in keeping with the apprentice tradition, to whom the TSE should commit stable, long-term resources.

A New Professional Identity for All Members of the Faculty

Taken together, these various recommendations affecting both the university-based faculty and the field-based faculty, aim to create a new institutional culture and a new professional identity, aligned more directly with the country's elementary and secondary schools. Schools of education have been under pressure to adapt to the culture of the Academy and to distance themselves from the public schools. The TSE, by comparison, dedicates itself to joining research, development, and preparation to the service of improving

education as practiced in elementary and secondary schools. To reach this goal, the school of education must support the emergence of a new faculty culture and the university itself must modify some of its policies. These five steps, then, must be taken by the TSE if needed changes are to occur:

- 1) Graduate students given teaching and other service-related assignments will be carefully selected and supervised, and provided the support required for success.
- 2) The TSE will implement the recommendations of the Holmes Equity Panel, thereby increasing targeted efforts to recruit and retain students, staff and faculty of color. This will mean developing and using indicators of progress toward an inclusive community and integrating diverse perspectives into the life of the TSE and into the curriculum.
- 3) The TSE will make a top priority of increasing the numbers of regular faculty committed to working in the PDS as a primary site for their teaching, scholarship, and service.
- 4) The TSE will encourage and assist a significant number of regular faculty members to connect their talents, interests, and experience to the TSE agenda, particularly to activities in the PDSs and to the professional studies curriculum.
- 5) The TSE will review and revise its policies and procedures for promotion, tenure, and merit pay in light of high standards for this work, and then negotiate to make appropriate changes in university-wide policies.

The range of policy reformulations required in the TSE and in the university at large will differ according to the conditions that already exist. In general, though, institutions will need new indicators and standards to evaluate an expanded range of faculty tasks at the PDS, including the work of teaching, advising, and supervising, as well as participation in curriculum development, collaborative research, governance, and professional development. Some questions about how to apply these standards can be answered only over time. How, for instance, will this new configuration of assignments affect considerations for promotion and tenure?

In addition, institutions must reconsider policies in regard to workloads and scheduling to accommodate these broadened activities. Finally, institutions will have to weigh whether to adopt such new kinds of faculty incentives as small grant programs to fund faculty projects associated with pursuits in the PDS. This report does not

provide the proper forum for thrashing out the details of the many policies that will affect field-based faculty; we attempt only to suggest a few of the issues that will have to be tackled. These include hiring criteria, titles, compensation, training, and relationships to the university and school districts.

The Core of Learning:

What All Educators Must Know

Images of a core evoke many thoughts. A core is something central. A core is a uniting element. A core is the pith that defines and establishes the character of something. The core of learning for an education professional consists of the essential knowledge that everyone--the 11th grade chemistry teacher, the middle school assistant principal, the second-grade teacher, and all others who pursue a career connected to the teaching and learning that occur in the public school--ought to possess.

The core is essential, but not all essential knowledge resides in the core. By this we mean to say that while all educators will have had the same core experiences, individuals will have gone on to acquire specialized knowledge. Thus, the chemistry teacher and the assistant principal each have advanced knowledge that goes beyond the core and enables them, separate from one another, to perform functions vital to the school. Education in both the core and in the specialties accumulates from a wide variety of learning experiences, in the larger university, in the TSE, in its PDSs, and at other sites in the field, as well as through independent study. Much of the learning will probably be done toward the attainment of degrees and certificates, but we also foresee some of the core and special learning being provided in informal, noncredit situations.

The professional core that we envision connects itself strongly to the teaching and learning of the classrooms of elementary and secondary schools. By implication, almost everyone who goes to work in public education should be prepared to teach and--with few exceptions--should launch their careers as teachers working directly with children. Among the possible exceptions are those, for instance, who work as school nurses, accountants in the district business office, and some university-based professors in the foundation areas. As we see it, all major advanced positions in education would build on a base of demonstrated knowledge and competence related to the teaching and learning of school-age children, who, after all, provide the reason why the schooling enterprise exists.

The TSE will create a professional force of educators bound to each other and to public education by a set of common experiences. All will have shared a core education that ensures that they speak the same professional language, that a certain body of skills has been mastered by all, and that they cherish professional values that unite them, not divide them. In addition, as teachers and former teachers,

they will all resonate to the heartbeat of the classroom, the life force that sustains every fiber of elementary and secondary education.

We do not advocate a single approach to providing core knowledge. Each TSE must experiment with a range of structures and programs that it develops to offer initial and advanced common learning. Institutions will pursue various structural and programmatic alternatives, differing in points of entry and exit, duration, terminal degree, as well as in content and focus. The institutions will be bound together by an uncompromising commitment to high quality learning for educators.

Each TSE need not reinvent the elements of the core. Major efforts to identify the base of learning for teaching have yielded considerable consensus. These include the syntheses of research and practice commissioned by the American Association of Colleges for Teaching Education, the Association of Teacher Educators, and the American Educational Research Association, as well as the standards put forth by the National Board for Professional Teaching Standards, the National Council for the Accreditation of Teacher Education, and the INTASC project of the chief state school officers. John Goodlad's reports on teacher education and the background review of the literature conducted for this Holmes study indicate a growing consensus, but not one free of controversy. An important set of moral and epistemological issues has been engaged—issues that must continue to be addressed around questions of equity and diversity, the nature of knowledge, power and privilege, and evidence.

The same areas that comprise the knowledge, skills, and dispositions required of beginning teachers also serve to organize the advanced core that brings together educators preparing for multiple roles including administration, counseling, social and health services, and further work in teaching. The specialized and role-specific knowledge and skills that reflect both requirements for licensure and consensus within particular professional associations provide a base for learning at the advanced level.

Faculty members at education schools apparently support the idea of a core professional curriculum for entry-level students more readily than they do for advanced students. But since we assume that good professional development for educators must foster teamwork and learning throughout one's career, we believe that concern about a core of knowledge should not be limited to initial preparation. The knowledge of working educators will grow out-dated and increasingly useless if they do not deepen and extend it. The TSE, with its PDSs and collaborating school districts, can be a partner in supporting such professional development. The idea of the "spiral curriculum" described by Jerome Bruner captures the essence of this

approach. Educators in elementary and secondary schools will revisit and rework core concepts and topics at increasing levels of sophistication and complexity.

The extension of the core into the graduate level in education puts our goal at odds with the dominant approach to graduate studies taken by many working professional educators, for whom advanced learning is, at best, a part-time activity to be squeezed into one's busy schedule. Regretfully, we found in our case studies that education school faculty resist the prospect of altering the traditional pattern, a stance that surely poses an obstacle to the reforms we wish to introduce. In our view, the current system operates as if credentials and pay increases, not professional knowledge were the point of advanced programs. Many programs have recently undergone redesign in light of changing expectations, while others follow a slower, more phlegmatic pace. We expect the new curriculums, program structures, and faculty relationships called for in this report to emerge over time, but the bulk of the change remains unrealized at almost all schools of education.

Students at the University of Colorado seeking elementary and secondary teaching certificates get their degrees in Arts and Sciences, reflecting the commitment of the education school to prepare a cadre of teachers who have strong liberal arts backgrounds and subject matter knowledge, as well as training in pedagogy, child development, assessment, the social and cultural aspects of schooling, and professional ethics.

What we describe in these pages may sound somewhat familiar. This discussion grows directly from previous declarations and publications of the Holmes Group. In *Tomorrow's Teachers*, for instance, we recommended abolishing the undergraduate education major so as to strengthen prospective teachers' general education and their depth of content knowledge in the subjects they would teach. We assumed that many (though not all) future teachers would begin at least a portion of their education studies as undergraduates, but that they would not major in education until the extensive professional sequence started in the fifth year.

We urged that teachers ground themselves in the arts and sciences, reasoning that if it took students majoring in arts and science disciplines four years to complete their liberal studies, then teachers, too, would need at least the same length of time. The Holmes Group remains fundamentally committed to securing more time for the education of teachers. Future teachers must have a

firm foundation in the arts and sciences in order to make teaching intellectual work. A period of internship adds further substance to this foundation. We hold fast to what we stated in 1989:

"Across Holmes Group campuses a variety of structures are taking shape. These include revisions of undergraduate programs, integrated five-year programs, fifth-year programs coordinated with undergraduate education, master's degree programs for liberal arts graduates who wish to enter teaching, and alternate route programs that rely heavily on apprenticeship. . . . The Holmes Group claim for more time to prepare teachers is being staked out in the form of "integrated extended" programs--usually five (or more) years in duration, including an internship that is both intensively supervised and formally reflected upon."(p.1)

The Elements of the Core

Our initial report proposed that the profession recognize three categories of teacher: the "career professional teacher" prepared not only to teach but to assume a range of schoolwide responsibilities; the "professional teacher" prepared to assume full classroom duties; and the "instructor" a novice with a temporary certificate who practices under the supervision of a career professional. We still believe in these categories and urge that they be institutionalized through state policy. The elements of the core draw on the education school's unique areas of knowledge, though they are organized conceptually in ways more compatible with existing frameworks. They concern themselves with the following:

- Human Development and Young People's Learning
- Subject Matter, Technology and Pedagogy for Young People's Learning
- Instructional Management for Young People's Learning
- Inquiry, Reflection, and R&D in the Interest of Young People's Learning
- Collaboration in Support of Young People's Learning

Human Development and Young People's Learning

Teachers must acquire substantial, rich, and varied knowledge about learners as an indispensable foundation for their practice. Of course, the 11th grade chemistry teacher, the third grade teacher, and the reading teacher will each need to know something different to handle their specialties. But all require, as a starting point, a broad, general understanding of human development and its implications for learning, and a deep knowledge of the core of their teaching subjects. This knowledge should enable teachers to delve into the psychological, social, and cultural aspects of students' learning and to

focus on the most important and enduring ideas of their disciplines. Teachers well versed in these areas use the knowledge to motivate students, to judge their responses, and to help students gain confidence as learners. Armed with this knowledge, the teacher recognizes how relationships between language and cultural background affect students' learning.

The stakes here revolve around whether or not the teacher knows enough to understand what the student brings to the learning situation and to appreciate what steps she must take to match the material and the pedagogy to the child's formal and informal experiences. Equipped with this knowledge, the teacher can step out of her own skin and empathize with the student and his distinctive needs as a learner. Knowledge of human development allows a teacher to avoid traps and heightens the likelihood of the teacher accepting the student's thoughts and actions as perfectly reasonable given the student's experiences. The issue is not whether the child has had the "right" experiences, but whether the teacher can seize on those experiences, whatever they may be, and help the student use them to greater advantage for learning. A skilled teacher structures the learning so that it builds on what the student knows to move him or her to higher levels of competence and understanding.

Subject Matter, Technology, and Pedagogy for Young People's Learning

Teachers acquire most of their subject matter knowledge in studies in the arts and sciences, though education courses that tie pedagogy to developmentally-appropriate content for youngsters of different ages augment this background. Moreover, in the TSE, this learning will not be monochromatic, but will take on interdisciplinary shadings to give it richer, fuller colorings. Additional input on the integration of subject matter gives educators the acuity to recognize the many artificial barriers that divide subjects, both when they learn about them and when they teach about them.

Interdisciplinary seminars, for instance, should make up a portion of the core learning curriculum. At their best, these seminars are the products of collaborations, developed and taught by members of the education and liberal arts faculties or by professors and school teachers. Where else are students of education going to delve into the relationships between and among the disciplines or the ways in which the same concept might be taught from various disciplinary perspectives? Such learning has characteristically been absent from more traditional programs, although we emphasize that interdisciplinary studies grow from sound learning in the disciplines. The matter of co-mingling the disciplines for purposes of additional important learning is a complicated and complex matter that educators need to understand.

We fear that without an approach of this kind education professionals will be unprepared as teachers to help their students jump disciplinary barriers. It's an old story: teach something to someone the way you would like that person to teach it. If students think their universities do not value interdisciplinary knowledge then surely those students, as teachers, will also deem it unimportant. The TSE can demonstrate its commitment to pedagogy that embraces both knowledge in the disciplines and cross-disciplinary approaches by making it a prime concern of the professional core.

Today's educators must also learn and have opportunity to develop facility with the rich array of technologies they can now exploit to help youngsters learn important ideas and powerful skills. No longer limited to texts, paper, and chalk boards, educators need the chance to explore the range of alternative technologies available for students' learning. They must experience and have opportunity to develop facility in the use of various technologies during their internships, giving attention to the study and examination of technology's power in helping youngsters learn their subject matters more effectively.

And just as educators must learn to select developmentally appropriate subjects and technologies for learners, so must they experience and develop expertise in constructing pedagogically appropriate tasks for students' learning. Often, this will mean providing youngsters with enriching experiences in and out of school, opportunities for self evaluation, and skills in record keeping. Today's technologies open a new world for both learning and better documentation of that learning.

Instructional Management for Young People's Learning

Good intentions will come to naught if a teacher cannot organize for instruction. We are talking, for example, about the ability to link curriculum planning, classroom management, instructional strategies, assessment, and conferences with parents. Teaching and learning are undermined without smooth links among a number of predictable activities. And without some of these connections, the parts would spin loose and chaos would reign.

We oppose the idea of teachers performing as clerks who manage preordained learning packages, but we know that a classroom functions best as a community and, as such, must be well organized. To send new teachers into classrooms without the technical knowledge related to fundamental duties is to drop someone into the ocean without swimming lessons. The person may survive, but it won't be a pretty sight. As in the other areas of the professional core, the knowledge imparted grows gradually more sophisticated so that

from an initial emphasis on the classroom and on school instruction the emphasis for advanced students, who already work in the schools and in district offices, revolves around such topics as cross-school analyses of students learning, staff development policies, and out-of-school learning opportunities for students. At this level, the school professionals who are advanced students may scrutinize and evaluate methods of school improvement and examine how state and local requirements might be better aligned with national goals.

At the risk of repetition, we repeat the idea that schools are complex systems and that districts and state systems, too, are networks of complex systems with an overlay of additional complications. Those in education who fail to appreciate these intricacies labor at a decided disadvantage. Education left to chance is education that may not happen and so every professional carries some responsibility for making the system effective for the students it is supposed to serve.

Inquiry, Reflection, and R&D in the Interest of Young People's Learning

Educators should learn not only how to cope with recurring problems, but also how to reflect productively on their students, their actions, and their learning. This area of professional education usually gets scant attention and most of the practitioners for whom reflection and inquiry are important parts of the job gained their insights outside of formal preparation. It does not have to be this way. Work in schools should be thoughtful employment that engages one's intellect and stimulates one's inquisitiveness. Reflective educators learn how to harness and discipline their insights for the benefit of students. The TSE should ensure that its students are predisposed to act in this way. Educators need not look beyond the learner-centered schools and communities they are developing to find the building blocks on which to construct this kind of education.

Inquiry and reflective practice are infused as a way of life throughout professional preparation in teacher education at the University of Connecticut.

Everyday concerns, not abstractions, provide points for educators to ponder and to explore. Worthy questions pour forth like water from a faucet: Why are some students and not others confused by a new concept in mathematics? What experience could help them come to better understanding? Why is it so difficult for students to come up with a topic when they are told that they can write a paper about anything? Why do high schools teach biology before they teach

chemistry? Professional education should equip school professionals to set sail for voyages of discovery. Every educator, in effect, has through his or her access to a classroom a fascinating source of material on which to reflect and about which to inquire. The advent of technology, like the steam-powered ships that replaced the clip-pers, makes this voyage of discovery faster, easier, and more productive.

Reflection and inquiry in the service of better teaching and learning must be lifted to a prominent place in the core of the TSE. As the reflection of PDS faculty becomes more sophisticated and disciplined, and as they get increased time for it (largely through contributions of PDS interns) they will profit from opportunities to learn again from inquiry--just as the university faculty will profit from opportunity to learn again about educational practice. Students will have around them to serve as models, professors and veteran practitioners who themselves strengthen their work through careful reflection and inquiry. The TSE should socialize its students to a norm that accords priority to the intellectual side of teaching. We expect the TSE to become a community of learners in the fullest sense.

Collaboration in Support of Young People's Learning

Collegiality appears to be only for those outside elementary and secondary schools. Practitioners in the schools remain isolated, working alone and spurning offers of collaboration because the education school and the public schools that hire them expect it to be that way. Like solo pilots in small planes, education professionals always run the risk of going into free fall with nothing to cushion their landing. However, school professionals owe it to their students, if not themselves, to dispel the curse of isolation and join with partners who can help with their students' success. The partners might be colleagues in neighboring classrooms or on college campuses, youth service providers, parents of students, local activists, or any of a multitude of others whose experience will enrich the classroom. In other words, the entire community should be enlisted in behalf of the students.

Schools treat teamwork as some exotic commodity, still unknown and untested. But those employed in business and industry--as well as a small but growing number in education--know that much more can be accomplished in unison, by delegating portions of the work that probably would not be done if left to individuals. Not only should the TSE encourage education professionals to accept this idea, but it must teach them how teams operate and how to work with colleagues. Education students can start absorbing the fundamentals of teamwork by performing as members of teams while in

the TSE and in PDS cohorts. Similarly, while some public schools have turned to health and social service agencies as partners, most schools have no such experience. At one time or another, many of those who work in these schools pass through the TSE as they pursue advanced studies. The TSE should infuse the studies of its students with the lessons they need to form partnerships.

We acknowledge, incidentally, that many faculty members in the universities and in schools of education, too, spurn the idea of collaboration and that much proselytization will be needed. Our case studies reveal that activities that increase interdependence in working relationships receive least support from the faculty members. Some professors in departments of teacher education, for instance, do not want to work with those in departments of school administration, and neither may want to work with the department of counseling. A note of encouragement, however, can be heard in the response of education faculty to the surveys we conducted, indicating that they support collaboration with public school educators. This interest extends to research partnerships, as well, where a majority of the faculty said that shared inquiry in public schools was highly desirable.

Professional Foundations

Foundations courses in education schools bring together perspectives from history, philosophy, sociology, and political science to examine American education. Some educators disparage foundations courses, but we believe these offerings, when taught well, have much to say about why educators do what they do and why public schools are the way that they are. The TSE can revitalize foundations courses by teaching them better and by showing students how the content relates to conditions that confront educators in the schools in which they work today. As taught in the core of professional education, foundations courses ought to be a wonderful vehicle for interdisciplinary knowledge that draws extensively on the humanities and social sciences. This approach should underpin the preparation of all practitioners.

Through interdepartmental collaboration, a set of foundations courses has been developed for all teacher licensure students at the University of Minnesota. This core provides students with crucial ingredients for classroom success: 1) a comprehensive understanding of the aims of education and the role of schools in society, including

the current dilemmas facing teachers; 2) the importance of literacy and critical thinking skills; 3) inquiry into the nature of teaching and schooling; and 4) assumptions underlying school reform, including school organization, pupil grouping, curriculum, and parental involvement.

Foundational knowledge can also be integrated into other courses rather than being left only to be taught in separate courses. Novices and advanced students might be helped to make connections between what they encounter in public schools and the content of the foundations course. Free-standing studies in the foundations of education should be included in the initial core, but with an eye toward deepening treatment of the various topics as part of on-going professional development. We recommend that in revising foundations courses the TSE include studies in educational ethics, which otherwise might not be supplied at all. Also, teaching about foundations should link itself to contemporary events, such as disputes over busing, choice, or outcomes based education, to demonstrate the enduring and relevant nature of knowledge about the foundations of education.

What It Would Look Like: A Scenario for Tomorrow's School of Education

The 21st century began just a few years ago and the school of education, though still housed in its former site, feels very different once one enters the old red brick structure. Let us walk through the building, a place where the entire milieu supports the education of school professionals who will be grounded in a common core, people linked by their devotion to teaching as an intellectual pursuit. A visitor cannot help but notice the amount of cooperation among those who teach education students and among the students themselves. Faculty members work together to plan and co-teach courses: the professors from the TSE, the professors from arts and sciences, and the clinical faculty from the PDS. The curriculum is the product of their collaboration. They meet regularly to discuss the programs of the cohorts of students they share and to identify the learning needs of individual students. The students follow the lead of the teachers, often pooling their talents and energies to learn together.

The visitor is impressed by the portability of the education. These students take it as natural to change their places of learning continually, rotating from campus to the PDS, and to other field sites that are locales for their learning. Off-campus experiential education flourishes to a degree far beyond that described by today's

reformists, who talk about this sort of learning principally in regard to high school students. Some education students even use social service agencies and other community facilities as locales for their learning.

Active, student-centered forms of pedagogy predominate, though lectures are used when appropriate. Every classroom seems to bristle with VCRs, CD-ROMS, and computers. Often, students gather in learning groups to solve problems or review cases. Frequently, they pursue independent projects. Camcorders sit on shelves for students to take into public schools to document their work. Faculty members accept as part of their basic work some responsibility for developing learning materials for professional education students, sometimes writing cases or problem scenarios. Other times they sit at word processors, writing comments onto "papers" that students submitted electronically or else they record video tapes in public schools that they incorporate into the lessons they teach on campus.

Sometimes students scrutinize work in the PDS without actually going to the school. The media lab permits them to observe PDS classes as they happen or to review videotapes of past classes. Cameras mounted inconspicuously in the corners of certain PDS classrooms create this running documentary. Interactive communications allow an instructor at the PDS to engage the students who are watching the class in the media lab on the college campus in a full-blown exchange of ideas. Furthermore, the work of the children in the PDS class can be called up on a disk in the media lab so that the TSE student can follow up on the results of the whole-class instruction that he or she has viewed.

Flexibility is a hallmark of this new TSE. Instead of every student being expected to do the same thing, education students, even those enrolled in the same course, may get different assignments in their studies, particularly in the PDS and at the various field sites. The approach resembles what happens when architecture students take internships in offices and some work on computer-aided design, while others build models, and still others help in the marketing department. The amount of time education students spend at field placements also varies; one student may go to the third-grade classroom solely to observe only once a week for two hours; another may act as a teacher's aide for a full day every other week.

Undergraduate and graduate courses for preservice and inservice teachers at Texas Tech University are taught regularly in the six professional development schools.

To a remarkable degree, almost without being conscious of it, faculty members in higher education have by this time in the first decade of the 21st century adopted many of the reforms that they once urged upon elementary and secondary schools. The changes have thrust education students into a new situation in which the TSE models for them the very kinds of behaviors that teachers were for years being asked to incorporate into the public schools. The proliferation of teamwork into the TSE is yet another of the reforms that once were urged only on precollegiate education. Just as they were telling classroom teachers in elementary and secondary schools for so many years, those associated with the education school have cracked through barriers of isolation. Small groups gather to collaborate on projects in rooms of the TSE that once were used only for classes.

A sense of community pervades the TSE. The pall of cynicism so familiar to those who knew this school of education just a few years earlier seems to have lifted. Maybe this happened because the studies root themselves so thoroughly in the issues of teaching and learning that dominate day to day life in the public schools. No one, professor or student, any longer scoffs and says of the content of the education courses that "this is out of touch with reality".

The Professional Development School:

Integral To Tomorrow's School of Education

When we created the Holmes Group in 1986, we invented the idea of the Professional Development School and we joined with practicing educators over the next several years to construct guidelines for developing this new genre. Early in 1990, we published *Tomorrow's Schools: Principles for the Design of the Professional Development School* and most of our member institutions have been refining the PDS ever since.

The concept of the PDS took hold, but like other good ideas it attracted cheap copies. The label "PDS" has been slapped on to all kinds of schools that do not begin to approach what we had in mind at the beginning. The most dangerous result of this wave of imitation is that the copies threaten to devalue and drive-out the real currency. When nothing more than a school to which students are sent for their practice teaching automatically carries the designation PDS, the deepest and most radical intentions of this innovation fade away. As a matter of fact, such deceptions, intentional or inadvertent, are inimical to the very essence of the PDS, which means to stress the professional integrity of the teaching profession.

We are concerned not because it is our idea that is being co-opted, but because the PDS remains integral to what we envision as Tomorrow's School of Education. Without the authentic PDS, the TSE will not be all that we know it can be. Nothing like the PDS has ever before existed in American education. Analogues can be found in medicine with the teaching hospital and in agriculture with the experimental station and the extension service, but the PDS contains characteristics that are *sui generis*. This institution and the network of continuous innovation that it is designed to sustain are meant to bring about substantial improvement in public schooling. The PDS is no McDonald's franchise to be set in place ready to operate simply by acquiring the proper equipment and following the rules in a manual. Sweat and tears make the PDS. It is as much a process as a place, and its dynamism means that the PDS evolves constantly. Human interactions shape each PDS and so no two PDSs look exactly the same, though all possess certain characteristics in common.

Completed research from Colorado State University's most fully-developed high school professional development school confirms that teacher candidates who participate in the PDS route to licensure are better prepared for their student teaching internship than those who attend the traditional program. The University of South Carolina has established 11 professional development schools, all of which reflect the six design principles for PDSs outlined in *Tomorrow's Schools*. Now, the South Carolina Commission on Higher Education and the State Department of Education have outlined a plan to create and fund PDSs for all teacher education programs in the state by the year 2000.

The PDS injects school-based and traditional research into teaching and learning in the context of school and education school renewal. It allows for educational theory to be examined under the strains and tensions of practice and readily discards those practices that don't bring improved results. Functionally, the PDS demands a close interplay of education faculties in higher education and in public schools. When it works, the PDS produces more engaged learning and greater understanding among students. Furthermore, it releases educators from the grip of ennui and immerses them in collaborative personal and professional growth so that they may join a learning community of education professionals. The PDS stands potentially central to three basic commitments of the TSE--professional learning in the context of sound practice, improvement-oriented inquiry, and educational standard-setting. We shall discuss each of these commitments.

Professional Learning in the Context of Sound Practice

A student of professional education benefits from a setting in which he or she may observe, be guided by, and participate in discussions with a cross-section of excellent practitioners. This the PDS provides, taking advantage of the expertise of educators throughout the building, as well as those from the participating TSE. Contrast a stimulating environment of this sort with what the student of professional education typically encounters in practice teaching--a supervising teacher who has little or no connection to the rest of the student's program and who works in isolation from the rest of the faculty. This absence of strong practical connections between the

knowledge and skills taught in the classroom of the education school and their application in practice represents a central, glaring weakness in most university-based professional learning for educators. Opportunities for practice in this kind of preservice education usually limit themselves to a single classroom and seldom offer the entire school as a crucible in which to forge knowledge into practice. Where a seamless connection between preparation in the university and preparation in the school should be expected, only gaps appear. Teachers in the public school are not brought into the work of the university and the professors are not involved in the public school.

The worst manifestations of this incongruity appear in places where the public schools fail most egregiously to serve their students. These overwhelmingly are the elementary and secondary schools populated by indigent children, where teaching and learning plumb the depths of despair and, for the students, the passage through the system amounts to little more than a march to oblivion. The PDS has a special mission in these settings. Good education for all depends on good practice in elementary and secondary schools everywhere, including the neighborhoods that historically have been the worst served. The PDS offers a format for realizing that goal, exemplary not only of best practice but also faithful to what we spell out in these pages as the objectives of the TSE in regard to equity. The TSE enjoys company in this quest. We have in mind James Comer's School Development Program, Henry Levin's Accelerated Schools Project, TheodoreSizer's Coalition of Essential Schools, and Robert Slavin's Success for All Schools. If the TSE fails to take the best of what it can offer to the settings where public education fails worst, then the TSE will aid and abet the preservation of a system that eschews that toughest challenge and settles for high scores where they are easiest to attain.

Ultimately, the stakes involve the level of practice carried out in elementary and secondary education, and especially in the most troubled schools. These schools most urgently need the attention of the nation's schools of education, which must accept the challenge of reforming and strengthening the connection between professional education on the campus and in the field. Most current models fail the test. Our response is the Professional Development School.

Improvement-Oriented Inquiry

Educational inquiry provides a second rationale for the PDS. One kind of inquiry calls for acquiring and exercising the habits of reflecting, questioning, and trying out and evaluating ways of teaching by one's self and with colleagues. Such habits redound to the advantage of both new and veteran educators. A second kind of

inquiry at the PDS involves systematic research and development aimed at generating and applying new knowledge by members of both the school and university faculty associated with the PDS. Practice becomes the locus of inquiry.

The PDS, in effect, redefines the relationship between researcher and practitioner, bringing the latter closer to the scholarly investigation while easing the way for researchers to tie their investigations more readily to actual situations. We assume that the practitioner's perspectives are vitally important to furthering research that aspires to be useful to practice. These perspectives tend to get overlooked in the usual research projects or else the practitioner's perspective gets simplified by researchers who do not appreciate the sophistication of the insights of some teachers. The PDS approach sets the stage for research to be a collaborative activity, combining the experience of the university-based investigator and the savvy of the classroom practitioner. PDS inquiry devotes itself to understanding a particular case, while traditional university-based research seeks more universal explanations and contributions to general theory. This emphasis on the close study of cases in context has precedent. Precursors include, for example, Piaget's pioneering investigations of the young pupil's thinking about basic school subjects, studies in which Piaget rejected the traditional methods of basic science in favor of extensive interviews with children.

All is not roses and sunshine, though, in attempting to bring about the collaborations that the PDS seeks. The cultures of the public school and the university easily clash and various tensions must be reconciled before teachers and researchers can work together comfortably and productively. Nonetheless, our optimism sustains us. TSE faculty members who responded to our survey expressed strong support for collaborative research with school teachers. More than half of the respondents indicated that schools of education "to a great extent" should

- (1) integrate faculty from schools, school districts, and other educational settings into the research and development activities of the school of education;
- (2) create opportunities for faculty research in a variety of field settings affiliated with the school of education; and
- (3) create opportunities for faculty research in collaboration with field-based practitioners.

Educational Standard-Setting

Attention to standards of all kinds, including those related to assessment itself, figures prominently in today's educational reform move-

ment. Standard-setting, subject by subject, dominates the concerns of the disciplinary organizations. New instruments to measure the abilities of both teachers and students are being fashioned for use nationally. At the same time, the nature of testing faces challenges as performance-based exercises, portfolios, and other forms of assessment come to prominence in an attempt to de-emphasize the influence of multiple-choice and short-answer questions.

We believe that the PDS should become a central resource to the standard-setting movement and that its contributions can be made in several ways. First, the public schools in the TSE's orbit can be locales in which to gather together the various strands of the movement so as to form frameworks for piloting these innovations. Second, because assessment will increasingly be embedded in practice, the PDS can gain and disseminate expertise on how best to incorporate assessment into the curriculum. Assessment reform must have a formative dimension. It should contribute to learning, not simply enhance the ability to measure the learning that has occurred. Third, as assessment methods become more judgment-based, educators must become adept at administering them. While outside authorities at the district, state, and national levels will create frameworks for standards, the teacher in the public school classroom will be asked to carry out the assessments. Pilot projects will be required to perfect the procedures, as schools in England discovered when they instituted a new curriculum and new assessments in the late 1980s. Again, the TSE and the PDS can work together to cultivate this expertise.

All of this said, we do not want to exaggerate the promise of assessment reform nor discount the technical difficulties that must be overcome for the new methods to be any better than the old ways of measurement. Studies reveal a range of problems and complications associated with both performance assessments and with portfolio assessments. We can best characterize our stance on educational standards as cautious optimism. In any event, the PDS can contribute greatly to educational standard-setting. This involvement by the PDS can help prevent the adoption of assessment practices that are not in the best interests of teaching and learning for all children.

What we have outlined here establishes an ambitious agenda for the PDS and causes us to acknowledge the many challenges and problems that lie ahead. Our case studies provide a further basis for closer examination of the future of the PDS. What have we learned about the PDS? What are the main difficulties to overcome?

Most of the case study sites have at least one PDS, but these early efforts to create PDSs typically involve only a vanguard of faculty members from the school and from the university. Most other faculty members of the two institutions remain on the sidelines, watching and perhaps criticizing. The air crackles with tension, even amid the early triumphs. The participants struggle to accommodate the demands of two very different cultures that differ on mission, reward system, recruitment patterns, clientele, working conditions, and governance.

While practitioners at PDSs perceive and report that they are making significant changes in their practices, researchers often attest to less dramatic results. So far, teacher education has received more attention than research in the collaborations between professors and schoolteachers. The reward structure of the university inhibits the involvement of many university faculty. Younger members of the faculty tend to participate in the PDS more than senior colleagues, but with problematic consequences. Not having tenure, the younger academicians worry about how they will be judged and rewarded by older colleagues who control the promotion and tenure process. Certainly, those in higher education who willingly involve themselves in the life of the PDS ought not to receive penalties. This work deserves rewards and if the people from the campus earn no academic recognition for their efforts then future participation by their colleagues will be jeopardized. Considerations of time weigh heavily. Regular participation in the life of a school means establishing oneself as a member of the community. The human relationships make increased demands on time, as does the travel time. As it is, faculty members say that the kind of research and development that they carry out at the PDS takes longer than traditional research to reach the publication stage. The TSE can ease the burdens by making allowances for these demands on time.

The School of Education at the University of Missouri-St. Louis and its school partners collaborate on their evaluation efforts. They collect basic data on the numbers and types of activities involving PDS participants, as well as conduct case studies and focus group sessions that reflect on and review the quality of their programs.

On the school side, teachers report additional burdens on their time, too, and the emergence of tasks that they feel unprepared to handle. If such situations are not managed carefully, the extra work can overwhelm participants, leading to fatigue and decreased effectiveness. Teachers are torn between their obligations to the children in

their classes and to the interns from the schools of education whose induction they oversee. How does one reconcile the demands of such a schedule? Even temporary exhilaration may not be enough to compensate for the extensive demands. In addition, the start-up costs for PDSs can be great in terms of time and resources, and in all honesty, many of these sites remain largely an idealized blueprint with much still on paper. The framework rises slowly across the country, as tests of its durability and quality remain.

Nonetheless, the early successes demonstrate that the PDS holds great promise for improving education in both precollegiate schools and in education schools and that augers well for our recommendations. So, the battle has been joined and, however rigorous, it must continue, because the quality of education at all levels will be lifted by the struggles and by the accomplishments that we anticipate. To that end, we propose a four-part agenda:

- The creation of at least one full-fledged PDS affiliated with each TSE
- A set of standards for evaluating the progress of the PDS
- Long-range plans for expanding each PDS into a local, state, regional, national, and international network
- Support from government and private sources at local, state and national levels to help institutionalize the PDS

At least one PDS—Given the work required, many of those developing the PDS will choose to concentrate initially on a single site and make a success of it. While we expect eventually that every TSE will sponsor a network of PDSs, trying to spread the effort too widely at first might mean diluting it since the involvement of only a portion of the faculty from each of the participation institutions can be expected. Experience suggests a range of starting points for creating a PDS network. The first site might be a school with a tradition of collaboration with the university, providing a history of trust and shared work as a foundation on which to erect this initially shaky structure. In this case, the PDS could be launched by nurturing the already existing informal relationships and allowing them to expand.

Standards—Without the imposition of standards, we worry about attempts to pass off imitations of the PDS as the real thing. As we noted earlier, we don't want to see the PDS discredited as just another flawed innovation when, in fact, what receives scrutiny is not even a PDS. Standards can be developed in stages as the PDS matures so that the incipient effort does not totter under the burden of a tome of regulations much too heavy for an infant to bear. The standards should be a collaborative product of the school and the university and should draw on the findings of such organizations as the National Center for Restructuring Education, Schools, and Teaching

and the National Council for the Accreditation of Teacher Education, both of which have started framing standards for the work of education professionals in the PDS. The standards might cover such conditions as the number of school and university faculty to work regularly with the PDS, the budget, the number of student placements, and the review process. The entire relationship should be regarded as voluntary and unofficial until it proves itself. This way outside organizations such as state agencies and accrediting groups are less apt to impose judgments and requirements while the PDS gestates.

Long-range plans—The PDS is not, we repeat, IS NOT, just another project for the education school. It must be woven into the very fabric of the TSE, its many strands combining with those of the institution's other programs. Beginning small, the TSE must plan to increase eventually the number of such sites so that learning experiences for most TSE students can occur at a PDS. This suggests the need for careful planning for a lengthy future for what will be an integral and integrating part of the TSE. The education school may, in fact, have to trim the breadth of other outside involvements and researchers may have to submit to some restraints so that they focus more of their investigations through the PDS prism.

Support — We recognize that for the PDS to occupy so pivotal a position in the future education of educators the Holmes Group will have to secure allies in the larger policy community. Holmes must make the case for the PDS over and over again. The national goals and accompanying state systemic reforms will require capacity-building at the local level. The proponents of the PDS must insert the interests of the PDS into the debate early and with vigor. Furthermore, advocates of the PDS should seize on the emerging interest in revitalized professional development to ensure that these discussions dovetail with the spread of the PDS.

New Commitments and New Kinds of Accountability for the TSE

Many of the institutions that belong to the Holmes Group have embarked on the long and difficult road that should lead to a new era of professional education for teachers and other educators. But advocates of simultaneous renewal of schools and schools of education face an uphill battle. Many of the obstacles encountered during the initial stages of their journey demonstrate that the movement will be neither quick nor easy. In fact, some of the ground gained with considerable struggle has already been lost, as several institutions have actually had to retrace early steps. Like a column of tanks halted in their advance, the nation's research universities have had to reassess the strategies for change that they have been using.

So far, reforms in most schools of education have been neither wide enough nor deep enough to impact significantly on practices in elementary and secondary schools, which, as we noted at the outset of this report, should be the focal point for measuring the effect of changes on the TSE. The changes to date have had too much of the quality of projects that can readily be dismantled when the impetus for change disappears.

The universities and their schools of education need an approach to change that is more comprehensive, more long-term, and powerful enough to knock aside obsolete traditions and cultural norms that block their path. The increasingly ambitious goals of the schools necessitate a more ambitious response by the universities. But we must be candid. While progress has definitely been made, most universities find it impossible to implement fully the worthy goals that they have endorsed for the education of school professionals. Yet, the aims of this battle remain eminently reasonable. Why then are the objectives of reform—which we have set forth on previous pages—so hard to attain? We think that the unwieldiness of the change process at university-based schools of education is due largely to three factors:

- Not developing a strong enough collective will to take on what amounts to a major challenge
- Not adequately supporting a critical mass of faculty needed to do the serious work of change

- Not creating alliances of the external forces needed to overcome obstacles over which they cannot prevail alone

Collective Will

The Holmes Group assumed that the country's great universities wanted to improve education in America, which, of course, calls for doing a better job of educating educators. And while we see progress in a number of universities, we see considerable inertia in others. Excuses abound--not enough time, not enough money, not enough people to take on the tasks, not enough cooperation from the outside. The rhetoric amounts to a lack of will.

This lack of will speaks to the generally negative attitude in higher education toward matters relating to elementary and secondary schools. Forming serious connections with precollegiate education--as the TSE is being asked to do--yields some public relations kudos, but few rewards within the realm of the Academy. A university can win prestige by strengthening the medical school or the law school so as to improve the professionals they serve. But strengthening programs between higher education and the public schools produces few accolades in most parts of the university. Despite these firmly entrenched attitudes, we continue to believe in the inevitability of progress. Higher education has a history replete with examples of overcoming obstacles. Properly nurtured, the will to change can create a TSE that accords precollegiate education the serious attention it deserves.

The importance of changing the culture of Teacher's College at the Univeristy of Nebraska-Lincoln to reach certain goals is well recognized. The college is developing modifications to its promotion and tenure criteria, its merit pay plans, and its criteria for graduate faculty membership to make those criteria fully consistent with work as scholar-practitioners and collaboration with professionals in the elementary and secondary schools.

When research and development were needed in support of the war effort in the 1940s, higher education provided it. When sacrifices had to be made to accommodate a flood of veterans who arrived after World War II under the G.I. Bill, higher education reconfigured itself. When a new kind of post secondary institution was required in the 1950s and 1960s, higher education created dozens of community colleges each year. When equity demanded that privilege be extended to groups that had been excluded, higher education in the

1970's admitted women and members of minority groups in unprecedented numbers. Clearly, higher education can turn itself inside out when it has the will. But this current challenge involving elementary and secondary schools is even more difficult because it is not just an added function for the professoriate, with massive amounts of funding or strong government pressures for the change-over.

Can it be that when it comes to the public schools, the magnitude of the problem paralyzes the university and prevents it from summoning up a will equal to the task? Is higher education intimidated? After, all, the changes will be judged not simply by what the TSE does to alter itself, nor by corresponding changes in the arts and sciences, but by how these changes in the university play out in the elementary and secondary schools with which the TSE affiliates. Some in higher education may fret over their ability to meet a challenge so far removed from the university and so linked to the troubles of society itself. Ergo, a challenge avoided is a challenge that cannot be lost.

In their most confessional moments, faculty members and administrators at education schools admit to worries over miring themselves in the morass of the problems of the public schools. Many academicians have had scant professional contact with precollegiate education and were appointed to perform work largely unrelated to day-to-day teaching and learning in public schools. But their reticence, while understandable, cannot be allowed to hold back change in Tomorrow's Schools of Education.

The reasons for linking the reform of the education school to the fortunes of elementary and secondary education are multiple. Even self-interest dictates a need for this kind of commitment. Like record stores that refuse to stock compact disks, schools of education risk being abandoned to irrelevancy, if they won't change. Education professionals who accept employment in the public schools have to prepare themselves for duties very different from those assigned to their predecessors. University education programs that do not make themselves relevant to the altered circumstances in the schools and to new discoveries on ways to improve practice will fall into disfavor with students whose careers cannot be built on outdated concepts and outmoded practices. Students will attend education schools that offer them what they need and bypass the others.

In places where university-based education schools have not given sustained attention to some of the most pressing educational issues of the day, students of education tend to learn only part of what they need to know. "All children can learn," for instance, is taken to

mean "no tracking," but education students do not learn the appropriate range of instructional strategies. "Authentic assessment" is taken to mean "no multiple choice tests," but education students do not learn to handle performance assessments. "The importance of working with parents" takes on a romantic notion of school-home cooperation as many of the complexities of today's families are glossed over. Education schools that fail to ground their work in well-studied practice inhabit a make-believe land, a Potemkin village of reassuring facades.

If building a connection to elementary and secondary education were just another project for the education school, it might hold greater attraction. A one-shot effort to improve mathematical reasoning by fifth graders in one particular school district would be manageable. An isolated attempt to introduce more writing in the biology classes in a network of high schools in the corner of one state seems achievable.

But fundamentally altering the way that almost three million educators develop their professional expertise so that they, in turn, can reorient the totality of their work for the more than 40 million children in precollegiate education throughout the country? The very thought of it boggles the imagination. As individuals, we can each understand the failure of will. One of the greatest examples of insufficient will on a personal level revolves around the spate of diet books, published one after another in the United States. Why? Because it requires less effort to read and talk about losing weight than to marshal the will to do it. Unfortunately, the will often arises only under great personal threat to life or limb, when life itself depends on summoning the will. But our future *does* depend on better educated educators and young citizens. A visit to any of the most troubled high schools emphasizes that point.

The time has arrived for universities to discipline themselves to a new regimen, one that involves thinking in new ways about reforming the professional education of educators. Perhaps the will for change might be more readily aroused if the task were viewed in a different light. The Holmes Group may have given universities the impression that each institution was on its own in creating a TSE. Now, to rectify that error, we want to stress the collaborative nature of our education renewal. Universities exercising leadership must speak up, but if their voices are to be heard and have effect, they must be amplified by joining together. Acting in unison enables us to consider alternatives, develop strategies, and amass support that none of us could do alone. Together, our sense of possibility and will should enable us to do what needs so badly to be done.

The Holmes Group intends to underscore this call for collective action by sending a copy of this report, *Tomorrow's Schools of Education*, to the trustees, presidents, chief academic officers, deans, and others at institutions of higher education. We will assess their willingness to exercise leadership in behalf of our agenda. We will invite them to participate in a national movement in behalf of implementing the recommendations of this report. We want those most responsible for making decisions at universities to understand that they have support and that no one wants them unilaterally to put themselves at risk by being the only ones advocating a bold new agenda. The common agenda that we hope appeals to a good number of leaders in higher education calls for determination to take the following actions:

- To commit to the development of a TSE that makes complementary contributions to educational knowledge, professional development, and education policy that sets and maintains standards of excellence for the country's educators and their students
- To establish enduring, formal partnerships in which both universities and schools adhere to and follow PDS principles, and together develop the range of human and financial resources needed to sustain a set of Professional Development Schools for quality professional education and applied study
- To work to change policies of universities and states that impede the development and retention of a highly qualified education workforce for the nation's public schools
- To raise scholarship money to ensure that education schools can have diverse enrollments at initial and advanced levels
- To hold our own institutions accountable for progress on this agenda by monitoring the efforts and encouraging public and professional scrutiny

The will to change can be demonstrated through clear and public statements, leaving no doubt about the institution's intent. An action agenda should be offered to underscore the seriousness of the commitment. It may perplex some observers to see us go through these machinations so that institutions of higher education can change. But we understand why the reform of professional education has lagged, and we need allies to counter the many impediments. We hope to generate greater collective will than has ever been behind such change before, for while we have a good base of support, it is insufficient to the challenge. Furthermore, education deans, provosts, and faculty members who step out in front in this struggle for improved education must not isolate themselves by

their acts of courage. They deserve backing from their trustees, from university administrators, and from faculty leaders, as well as from allies in other universities.

A Critical Mass of Faculty

Too many spectators and not enough players. That sums up the situation facing those who would like to create Tomorrow's Schools of Education. As a practical matter, transformation demands a sufficient number of participants to put change in motion and to sustain it during the difficult periods when countervailing forces will try to bring it to a halt. The university faculty sorts itself into several factions when we examine reactions to the agenda we propose. Some people, usually fewer than a majority, are willing and prepared to pursue a new agenda. Another group has the capability, but insufficient backing—at least not until a different sort of reward structure lends them the support they need. Still another group contains people sympathetic to the goals of the TSE, but ill-equipped to help without pursuing professional development. And yet others, the diehards who hold the potential to undermine the entire effort, refuse to promote change in schools of education. Strategies must be fashioned to deal with each of these various groups. The change process is riddled with complexities, but the scholars who have studied change give us ideas that have practical application.

What we propose for the TSE calls for more work and requires more pairs of hands. It also demands new kinds of faculty expertise and new approaches to collaboration. Professional development of our university faculty and of our faculty colleagues in the schools will be needed to increase chances of success. Constructing the requisite critical mass for this enterprise depends, of course, on enlisting adequate numbers of people in the efforts. The numbers can be bolstered by incentives and staffing changes. The steps outlined in the paragraphs that follow embody simple and logical measures for giving the education school the human capacity to accept a changing mission.

Incentives

Faculty members, no less than other people, want to feel appreciated. They will more readily shift assignments or take on extra work if they know unequivocally that the university and the school of education value their contributions. Incentives and rewards help deliver this message from a university that wants to demonstrate its support for those who work with elementary and secondary education. The backing may take the form of extra attention, extra time, or extra money.

Cincinnati Public Schools and the University of Cincinnati have developed new staffing patterns for teacher education that include half-load, half-pay, fifth year internships that are supported by allocation of staffing dollars and some added district and university stipends for intern support teams composed of a lead teacher mentor, career teachers, and university faculty.

Added attention might approximate no more than words of appreciation so that those who take on expanded roles know explicitly that the education school and the university consider these efforts important to higher education. More concrete incentives might include assistance with the extra clerical load, say, to keep records on site-based research resulting from work in the public schools, or such amenities as car phones and fax machines that can demonstrate concrete support for this work. Even providing a van to make it easier for university faculty to travel to the school can encourage their participation.

Time for work in the public schools can be squeezed out of the schedule by adjusting faculty workloads so that the hours spent in the public school do not have to come on top of everything else. Also, interns and graduate assistants who fill in occasionally for regular faculty members can free them to perform other jobs. And, finally, raises in salary and bonuses can spur participation. If the faculty member decided over a several-year period to go on to other duties, the bonus would lapse. The concept of added pay for people doing high priority work during a period of transition seems worth considering.

Staffing

A TSE can increase the number of faculty members prepared and willing to work in the schools simply by hiring new people who are so inclined. Despite tight budgets, hiring looms as a possibility because the demographics of an aging faculty suggest that openings will be created by an increasing number of retirements during the next decade and a half. In addition, hiring might be authorized to promote the commitment to diversity that should be part of the restructuring of the school of education.

The school of education should also regard the PDS as a potential source of talent for carrying out new roles. The very concept of the PDS demands a partnership between school and university, includ-

ing the assumption of certain clinical faculty roles by school professionals. Each person who affiliates himself or herself with the university through the PDS represents a potential addition to the formation of a critical mass. As the number of teachers certified by the National Board of Professional Teaching Standards grows, they, too, can be regarded as potential contributors to the critical mass of universities in their areas. Professional development can be a vehicle for converting some of those already on the faculty--but unprepared for the new mission--to become productive contributors to the TSE. No less than in elementary and secondary education, professional development in higher education can be used to retrain those whose knowledge and skills are insufficient to meet new expectations. Sabbatical leaves and post-doctoral grants can augment professional development and provide others with time for learning what they need to participate in the TSE.

Whether through hiring or professional development, the TSE must attend to the need for having more faculty members who can assume responsibility for knowledge development in the areas designated for expanded work--developing knowledge about knowledge, knowledge about professional development, and knowledge about policy development. Existing faculties almost certainly must be enlarged or retooled to fulfill this mission. With this added capacity, comes the critical mass that can be a foundation for creating a successful TSE.

External Forces

If the Holmes Group stands alone, solitary and exclusive, it places its future and what it seeks to accomplish at peril. The organization must add members, form regional networks, and ally itself with a broad range of partners. These strategies will bolster individual TSEs by weaving them into a web of external forces. The time has arrived for this outreach. Holmes launched itself by inviting the affiliation of at least one university in each of the 50 states, and at least one for every 25,000 teachers, assuring itself of an elite membership. Ten years later, we realize the limitations of this conception. To create and realize the potential of the TSE, the universities must widen their connections and form coalitions with education organizations and agencies and with the vendors of education products and services.

The commitment to raising levels of quality and to broadening access to the educating professions means that the Holmes Group must face outward, not inward. To achieve inclusiveness a larger number of institutions of higher education can join our efforts, for instance, through consortia that unite universities with extensive

research capacity but limited capacity for professional development with universities with extensive capacity for professional development but limited capacity for research. These universities will complement each other and the resulting synergy will produce an impetus for change more powerful than any institution could provide on its own.

Alliances with partners outside the universities offer the opportunity to spread understanding for what we seek to achieve and to enlist support for our goals. To these ends, the Holmes Group proposes to enter into partnerships with such organizations as the American Association of Colleges of Teacher Education (AACTE), the American Association of School Administrators (AASA), the American Federation of Teachers (AFT), the National Board for Professional Teaching Standards (NBPTS), the National Education Association (NEA), the National Policy Board for Educational Administration (NPBEA), the National Staff Development Council (NSDC), and other groups sympathetic to advancing the goals of our three reports--*Tomorrow's Teachers*, *Tomorrow's Schools*, and *Tomorrow's Schools of Education*.

The Auburn University College of Education, with support from the Alabama Power Foundation, has for the last two years provided leadership to a network of professional development schools involving six universities and nine school sites.

In addition, the cause of educational reform can only gain if the Holmes Group cultivates friends among the leading companies, both for-profit and non-profit, whose products and services are integral to public education. Educators often overlook the makers of computers, textbooks and materials, tests, and other school resources when they reflect on potential partners for school improvement. But vendors, too, have an interest in the well-being of America's elementary and secondary schools and probably would welcome the chance to be allies in bolstering the education of educators by joining in research and development activities in PDSs.

External forces of all kinds figure prominently in our plans for lifting the quality of the education of educators. Right now, schools of education meet minimum state regulations for initial teacher preparation, but are free to do what they choose in most other programs. Many universities reject national professional accreditation of their education programs, a fact reflected by the fact that fewer than two-thirds of the Holmes members have accredited programs. Some university-based education schools perform in exemplary fashion, while others ride the distinguished coattails of the great institutions, of higher education on whose campuses they reside.

The 250 schools of education in the United States that now offer degrees for doctoral and masters study as well as initial education preparation should be accountable to the public and to the profession for the quality of their contributions to educational knowledge, to professional practice, and to education policy setting. We will ask our professional partners and allies to join us in framing new standards for the TSE. Those schools of education that cannot meet these new standards after a reasonable length of time should be closed.

No education school that offers a questionable program for initial preparation should be permitted to offer advanced programs for educators. No education school should conduct research on educators or produce research for educators if it cannot provide quality professional development for educators. If an education school contributes good research but poor professional development, it should become a laboratory or a center or a department in arts and sciences and cease to pose as a professional school--for education schools bear the unique expectation that their faculty will themselves be good educators, and their students will indeed learn important things. And if an education school claims to offer professional development of quality at advanced levels without strength in research and education policy analysis, its programs should not be recognized, for the faculty are ill-prepared to educate professionals at advanced levels.

Like any business that has customers, the TSE must concern itself with the market, which in this case comprises the school districts that employ TSE graduates. We reject the philosophy of caveat emptor. The abilities of students who come through the TSE should be guaranteed by assiduous documentation and evaluation of their performance in actual work situations. Those with assignments in the PDS will be assessed by highly qualified practitioners over a sufficient period of time under conditions that permit employers to have confidence in the graduates' ability to practice. Nothing about the professional education of educators should be left to chance. The Holmes Group will take several steps designed to promote standards, collaborating with the Educational Testing Service and the Council of Chief State School Officers to develop assessments for use during our students' internships. We will work also with our national and state school board associations to encourage local school boards to support policies that require performance assessments as a precondition for hiring. Finally, we will invite universities to give hiring preference both in the TSE and in their PDSs to candidates with National Board certification and with successful TSE internships.

The external pressure of public opinion can be another force for improvement. Tomorrow's Schools of Education should raise public

awareness about the professional education of educators by maintaining a dialogue with the public. Universities and public schools owe their very existence to the public whose taxes, donations, and tuitions sustain educational institutions. The new era that we envision should include public information campaigns that help people understand exactly how meritorious professional education for educators can promote the goal of making excellent learners of this nation's children.

National professional accreditation is yet another important lever in strengthening the education profession overall and assuring quality learning for those pursuing careers in schools and ed schools. We intend to help to develop new advanced standards for schools of education that are compatible with TSE goals. These developmental standards should promote improved contributions to educational knowledge and its application, to quality education of professionals at both initial and advanced levels, and to education policy. Toward that end we will ally ourselves with the National Council for Accreditation of Teacher Education to incorporate these new standards into the expectations for all institutions offering advanced programs--developing new accreditation processes and procedures for TSEs. We eventually expect national professional accreditation of all TSEs, and we will work with our new partners and allies and the public to impose sanctions on those that demure.

In the Final Analysis

We realize that the dose of reality we have administered here may be too strong for some tastes. But universities and their schools of education that fail to assess the current public mood or choose to ignore significant changes in the educational environment around them, do so at some risk. The collapse of public education will be at hand in the absence of action to address the failings of educators--both those in schools of education and those in precollegiate education.

In this document, we have assumed the peculiar posture of talking to ourselves. On the one hand, the Holmes Group uses the occasion of this report to affirm its intention to improve schooling in America for all children, and especially for those worst served. On the other hand, we speak to ourselves to admonish some of our colleagues and to reaffirm our own commitment to the difficult course we have set for our future. We do not seek simply to lecture others. We want to be clear about our commitment to the improvement of public education in America--to our intent to build authentic professional schools for educators who work in them--and to an action agenda to put our own houses in order to serve them better.

Henceforth, the schools of education that commit themselves to implementing these recommendations to establish Tomorrow's Schools of Education (TSEs) will take all necessary steps to transform words into deeds. The greatest challenge to democracy as the country nears the 21st century revolves around access to knowledge and to equitable opportunities to learn. The TSE accepts its role in trying to avert the tragedy of making permanent the two-tiered educational system that now characterizes American public education. Three generations ago, W.E.B. DuBois observed: "Of all the civil rights for which the world has struggled for 5,000 years, the right to learn is undoubtedly the most fundamental." His enduring statement continues to guide us.